

CHOICE

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Can you make
great espresso
at home?

Could you
**retire at
50?**

WAP:
what's it all
about?



TESTS: 51 cm TVs • Tents • Toasters • Simmer sauces • Hands-free kits
Steam mops • Solar showers

Follow that dream, but...



Jane Mackenzie

A lot of people dream of retiring early — even as early as 50 — and still having a comfortable and fulfilling lifestyle for the rest of their lives. An article in this issue takes a look at the reality of this (see page 18).

Your pension and super aren't likely to be enough on their own, so we asked some financial advisers to give suggestions to four sets of people in different situations on how they might retire early.

We were a bit surprised to find how risky some of the investment strategies would have to be to achieve a significantly early retirement: three out of four of our case studies were advised by at least one adviser to borrow money to invest, and the main reason the fourth wasn't seemed to be because they already had.

This was despite one of our case studies being a single mother who doesn't even own a home yet, and the others already having considerable debts.

We're not saying the strategy of borrowing money to invest won't work — for some people it clearly does. But if your adviser seems to be making projections simply based on likely future interest rates, inflation and the possible performance of the sharemarket we think you should be cautious. What if your circumstances change — you lose your job, get sick, have another child, want to upgrade your home or need to take on unexpected family responsibilities? Investment advice shouldn't be based on your current lifestyle being set in concrete and only external factors changing.

We all need dreams to keep us going, but if the flavour of the month seems to be encouraging people to achieve their dreams (which may be very ambitious) by borrowing money, CHOICE is naturally cautious. You should be made starkly aware of the risks involved, and may perhaps be better off compromising the dream for a bit more security and comfort in the present.

Jane Mackenzie
Editor

Your letters

We welcome the letters you send us — please always include a daytime telephone number so we can contact you quickly if we want to follow up your letter. We're sorry we can't personally answer every letter we receive, but we do use them in our research. Thanks for taking the time to keep in touch.

Write to us at CHOICE, 57 Carrington Road, Marrickville 2204.
Phone us on (02) 9577 3399. Fax us on (02) 9577 3355.
email us at ausconsumer@choice.com.au.
Web address: www.choice.com.au.

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Cover photo: Kent Mears



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REQUEST A TEST

If you've seen something you'd like us to test, email us at requestatest@choice.com.au or call us on (02) 9577 3399.



◀ *Four-slice toasters are handy for larger families — page 44.*

CHOICE Online

Don't forget: if you're a current CHOICE subscriber you can also have free trial access to our website: www.choice.com.au Just call Consumer Services on (02) 9577 3399 and have your email address ready.



◀ *51 cm TVs on test — page 39.*



Correction

Hifi VCRs

CHOICE, Jan/Feb 2001

In the table on page 46, we gave the **TEAC MV-6092's** warranty as one year, extendable for up to nine years. **TEAC** now tells us it has a three-year warranty, extendable for \$29 a year for seven years after that.

All systems go?

There's nothing more annoying than a mobile phone cutting out, as some Singapore consumers found late last year. More than 100 complained to their consumer organisation, CASE, after a newspaper story reported problems with three **ERICSSON** handsets: the **T10**, **T18** and **T28** models; they couldn't be switched on again after charging, or automatically switched themselves off.

Ericsson said: "The problem of automatic switch-off is due to a bad connector between the mobile phone and its battery." It's agreed to repair or replace the handsets in Singapore for an unlimited period.

When CHOICE asked whether Australian consumers have been experiencing similar problems with these models, the Director of Consumer Products, Mark Williams, said Ericsson can't comment about the number of reported

cases, but that any problem relating to an Ericsson mobile phone can be resolved by calling its customer service line on 1300 650 050.

We'd also like to hear about problems you have with any mobile phone. Write to us at CHOICE, 57 Carrington Road, Marrickville 2204; email us at mobiles@choice.com.au or have your say in our forum by going to www.choice.com.au, clicking on 'forums' under the heading 'CHOICE Talk', then 'computers and phones'. (If you're a current CHOICE subscriber you can have free trial access to our website. Just call Consumer Services on (02) 9577 3399 and have your email address ready.)



Depressing website results

Depression's still a problem many people are reluctant to admit to and seek treatment for, and the anonymity of getting information about it online can be attractive. Recognising this, two Australian-based researchers recently surveyed 21 websites you'd be likely to come across if you typed 'depression' into an Internet search engine.

They assessed the quality of a website by how well its information matched a 43-item checklist based on guidelines for doctors, developed by the US Agency for Health Care Policy and Research. These guidelines are evidence-based: they recommend particular treatments for depression based on the best available scientific studies of what works for particular groups of people. If the information on the website agreed with the guidelines, it got quality points.

Each site was then given a score for discussing other important issues about depression, such as seeking help, side effects of drugs, the relationship between depression and suicide risk, and different treatment approaches for young people.

In addition, the two researchers each gave a subjective score of each website's overall quality.

The findings were (sigh) rather depressing: the average score out of 43 (for matching the guidelines) was 4.71, and the highest just 13. For discussing other issues, the average was a little better at 9.8 out of 17, but the average 'overall quality' score given by the researchers was 3 out of 10. Some of the low scores were due to a lack

of information, but much of the information was simply wrong.

The researchers also compared these measures of quality with another common way of rating websites, called the Silberg score for accountability. As indicators of quality, this uses features such as whether the site's author is clearly identified, sponsorship is disclosed, and sources and references are mentioned.

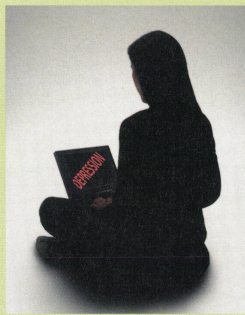
Unfortunately, in this case the Silberg score failed as a useful measure: sites with better Silberg scores didn't necessarily provide information that agreed with the evidence-based guidelines.

So how can you tell if information you're reading online is reliable if the

site doesn't state what scientific studies it's based on? There are no guarantees, but in this case the researchers tended to find better-quality information on websites produced by organisations rather than individuals, and on sites where an editorial board reviewed the information.

The bottom line? Don't rely on the web for health advice, but it can be good for background information. Use it to work out what questions to ask your doctor, rather than as a substitute for their expertise.

This report first appeared in the March 2001 issue of *CHOICE Health Reader*. Published 10 times a year, it has plenty more up-to-the-minute health and nutrition information in every issue. If you'd like to subscribe, phone (02) 9577 3399. And the March/April issue of *Computer CHOICE* has an article with further advice on identifying reliable websites — see page 49.



Your rights: update

In our November 2000 issue (*Over the top, but legal*, page 6) we reported on an exclusion

clause displayed on a sign at a WA water-ski park (see above). The sign told people they entered the park at their own risk and had no right of action against the owner or operator for injury, or loss or damage to any property.

We sought legal advice and reported on the situation as it would be dealt with under contract law, which says putting up such a notice is quite legal, and the remarks binding on most adults. However, we've since received additional information.

If you've suffered any injury or damage on the premises of a provider of services who has a disclaimer displayed, you could have recourse to the Trade Practices Act, which gives substantial protection to consumers.

For example, if a corporation provides services to a consumer, there's an implied warranty in every contract that the services will be rendered with due care and skill. And displaying notices that purport to exclude, restrict or modify such implied terms (like those in the disclaimer pictured) is invalid.

The academic who wrote to us about the relevance of the Trade Practices Act in these matters suggested two reasons why such exclusion notices are put up: either the business is simply ignorant of the law, or it knows it's illegal but wants to discourage consumers from taking up their case.

Thanks to him for helping us stay up-to-date. We've reported the matter to the Australian Competition and Consumer Commission.

YOU ENTER THESE PREMISES

AT YOUR OWN RISK and on the CONDITION that you have NO RIGHT OF ACTION against the owner or operator of these premises or their servants or agents for any injury to you or any person or loss or damage to any property.

It does not matter how the injury, loss or damage is caused, even if it is caused by the NEGLIGENCE or BREACH OF CONTRACT of the owner or operator of these premises or their servants or agents.

Stop-smoking update

Want to quit but failed in previous attempts? Perhaps you want to join the growing number of Australians who've turned to Zyban (bupropion hydrochloride), a relatively new oral stop-smoking drug that's been available in Australia since last November. In the first three weeks after it was listed on the Pharmaceutical Benefits Scheme (PBS) on February 1 this year, 122,000 prescriptions for the drug were authorised — that's more than 5500 a day!

Zyban is an antidepressant that helps control nicotine withdrawal symptoms and cravings. Though it isn't quite understood how the drug works, one hypothesis suggests it increases dopamine and noradrenaline in the brain to counteract the reductions of these chemicals during withdrawal.

Talk to your doctor if you think this medication could help you quit. As Zyban is listed on the PBS, a prescription will cost you up to \$21.90 (or \$3.50 if you hold a concession card) for 120 tablets, which should be enough for a seven to nine-week treatment. But you can only get one PBS-subsidised prescription of Zyban in a year, so if you need more, you'll have to pay the full price: \$75 for 30 or \$140 for 60 tablets.

Zyban should only be taken under medical supervision, and you shouldn't take it if you're prone to seizures, have an eating disorder, are pregnant or breastfeeding, or take certain drugs (such as antidepressants, antipsychotics, antihypertensives, theophylline — used for asthma and bronchitis — systemic corticosteroids or HIV protease inhibitors).

Risks and possible side effects

- The most common side effects of Zyban include a dry mouth or insomnia, but there's also a one-in-a-thousand chance of having a seizure.
- In Australia 78 cases of suspected adverse reactions in connection with the use of Zyban have been reported in the three-month period November 20, 2000, to February 20, 2001. In 68 of these, Zyban was implicated as the sole suspected drug. The more commonly reported problems involved the nervous system, the skin and psychological disturbances. Other suspected reactions included nausea, shortness of breath, visual disturbances, abdominal pain and facial swelling. There's been one reported fatality so far: someone died of a massive lung clot about three days after they stopped taking Zyban. But at the time of writing, a link with the drug had been neither established nor excluded.
- Zyban is currently on the Therapeutic Goods Administration's 'drugs of current interest' list, which means it's monitoring adverse reactions.
- In the UK, more than 1000 adverse reactions, including 56 seizures and 13 deaths, have been reported since June last year, but UK authorities say the link between the drug and the apparent reactions is unproven and could be related to nicotine withdrawal and/or interaction with other drugs.

For more information on other stop-smoking aids, see *Breaking the habit* in the July 2000 issue of CHOICE, or subscribers can phone for a free back copy. You can also read the article — and more information on Zyban — on our website, www.choice.com.au (type 'smoking' in the search box).

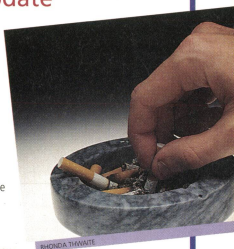


PHOTO: THAWTE

Update

What's in a scoop?

CHOICE, Jan/Feb 2001

Sugar might no longer be considered too bad for most of us, but people with diabetes still have to watch their blood glucose levels. And it appears that fruit ice confections (there are two on the market; **WEIS Frutia** and **VITARI**) aren't a bad choice for them after all.

People with diabetes are encouraged to eat foods with a low glycaemic index (GI) to help control blood glucose levels (GI measures a food's ability to raise these levels).

The manufacturer of **WEIS Frutia** (Mango) recently had its GI measured, and it was found to be low at 44. **VITARI** (Wildberry) has a moderate GI of 59. In comparison, the GI for ice cream ranges from 25 (low) to 65 (moderate).

For more on GI and what it means for most people, read *Sugar: no longer a bad guy?* in CHOICE, September 1998.

Burning CDs

Ever wanted to make your own music compilation CDs? What you want is a CD writer or 'burner' — a drive for your computer installed above or, in some cases, replacing the CD-ROM drive. You can also use them to back up files. They've been around for a while, but improvements in speed and reduced price tags mean

they now appeal to more people than ever before — you can even buy some new computers with a CD writer instead of the older CD-ROM drive.

Our sister magazine, *Computer CHOICE*, recently tested nine CD-RW (rewritable) drives for speed and ease of use. The test found that what you want to use the CD writer for will

determine which drive is best for you. The best drives for backing up files didn't perform as well when copying a music CD and vice versa.

CD-RW technology is developing rapidly, so it's unlikely the exact models tested will be on the market for long. However, the following recommendations from the test should serve as a guide to the minimum performance of new models. The **CREATIVE CD-RW Blaster 8432** at \$369 was the standout performer for backing up files, while for recording music, the **YAMAHA CRW824E-VK** (\$479) topped the bunch.

For more info, see *Computer CHOICE*, March/April 2001, or read the web version at www.choice.com.au (type 'cd-rw' in the search box). If you'd like to subscribe to *Computer CHOICE*, call our Consumer Services on (02) 9577 3399, or see page 49.

Facts

■ There are two broad types of CD writer: CD-R (recordable) drives, which can write information or music to a blank CD once only; and CD-RW (rewritable) drives, which can write multiple times to a rewritable CD.

■ The speed of any kind of CD drive is measured by how many times faster than an audio CD player it's able to spin. For example, a drive that can read CDs at 4x should be able to read a 72-minute CD in as little as 18 minutes.

Don't pay twice for calls

Now there are several phone service providers with a wide variety of pricing patterns, it's not uncommon to use different carriers to call different destinations at different times. For example, you might choose to use one phone company for local calls and another for your STD or international calls. You can even decide on a call-by-call basis to use an override code to make your call through a company that's offering lower charges to your destination or at a particular time.

However, the following scenario illustrates the need to keep a very careful eye on who's charging for which calls.

Mr and Mrs Pienaar made quite a few STD calls, and although their main provider at the time was Telstra, they quite often used an

DANIEL GRIFFITHS

override code to make their STD calls through One.Tel at a cheaper rate. When they noticed STD calls on their Telstra bill, they assumed they'd forgotten to use the override code. Eventually, though, they became suspicious, and crosschecked their Telstra bill with their One.Tel bill — and found they were being charged for the calls by both companies. Telstra has since refunded the Pienaars for the incorrect charges.

The Telecommunications Industry Ombudsman's Office (1800 062 058) thinks this is a rare case, and says billing complaints have been decreasing in recent years. However, the case illustrates the need to be vigilant: crosscheck your bills.

WORLD CONSUMER SNAPSHOT

■ Promo petrol pumps

Filling the car up might give you a headache because of smelly fumes, not to mention the price. But it's not often you'd worry about the noise pollution. In the US, however, home to the innovative Pump Radio Network, motorists in some states are subjected to two minutes of ads and entertainment from a loudspeaker fixed to the petrol nozzle, according to the US magazine *Consumer Reports*. At least one island at each station features regular pumps, and you can turn the volume down on the noisy ones — but not off. We can't wait...

■ The Mediterranean diet in a pill?

Food magazine from London reminds us of the rumour that people in Mediterranean countries live longer — something to do with garlic, olive oil, tomatoes or, hang on, was it red wine? Enter UK company Boots' Mediterranean supplements, which include 'Chicory Inulin', 'Tomato Lycopene', 'Red Wine Extract' and 'Healthy Heart Maintenance' (a mix of fish oil, vitamin E, olive oil and garlic). There's no advice on the

packs about exercise or only taking supplements as part of a healthy diet.

The Tomato Lycopene packaging says: "One capsule is equal to two large ripe tomatoes per day", prompting *Food* magazine (and us) to ask, what about flavour, texture, vitamin C and dietary fibre? And what about vegetarians, because these capsules are coated in meat-derived gelatine?

Finally, these Mediterranean pills are made in — England!

■ Cheers from Oz!

You could do worse than picking up a drop from down under, according to our German cousin, *Test* magazine, which recommended Lindemans Bin 65 chardonnay as one of only four out of 32 wines to get a four-star rating. And the US-based *Consumer Reports* ranked the chardonnay third out of 19, describing it as: "A very good chardonnay that's fruitier than most, with traces of apple and Juicy Fruit gum aromas. Superb value." *Consumer Reports* also chose Lindemans Bin 45 as its "best buy" in the cabernet sauvignon category, describing it as: "An excellent wine...[should] get even better with age." Need another reason to start sampling?



GEOFF AMBLER

Riding on the footpath

I was very pleased to see the Choice Cut entitled *Road rules for Christmas pressies* (CHOICE, December 2000). It's excellent when you're able to draw attention to laws that affect many, but may not be readily known.

It may seem reasonable to assume that with the introduction of the Australian Road Rules (ARR), the laws will be identical in all jurisdictions, but unfortunately some differences still remain, including those concerning bicycles on footpaths.

Rule 250 provides that cyclists of all ages may ride on the footpath unless prohibited under "another law of this jurisdiction". In the ACT, Queensland and NT, cyclists generally may ride on the footpath (unless other prohibitions apply). In SA, Victoria and WA only children under the age of 12 may do so, although in SA disabled cyclists carrying a certificate from a doctor may also ride on the footpath. In Tasmania, no-one is allowed to ride bicycles on the footpath, regardless of age. Your version applies to NSW.

Ron Shanks

Australian Road Rules National
Drafting Group
South Australia

Ron's right: we did make the wrong (if reasonable) assumption that Australian road rules would apply

nationally, and the version we printed in fact only applies to NSW. Thus, in NSW, adults aren't allowed to ride on the footpath unless they're accompanying a child under 12, while teenagers can ride on the footpath if they're with an adult who's with a child under 12.

Like us, the national cycling lobby group's peak body, the Bicycle Federation of Australia (BFA), would like to see a nationally uniform set of road rules for cyclists. As far as riding on the footpath is concerned, the BFA supports the NSW model, which allows children and accompanying adults to ride in relative safety on the footpath. As for other cyclists, the BFA thinks they should be using roads — contingent, however, on safer road cycling conditions.

Doing the right thing by consumers

Almost two years ago we purchased a Sony clock radio from KMart in Belmont, Geelong. After about 20 months, a brown spot appeared on the top, which was quite hot to the touch. The one-year warranty was up, of course, but we were concerned that this could be a manufacturing fault and should be brought to the notice of Sony, so we returned the radio to KMart along with the original receipt and guarantee.

KMart told us it couldn't give a replacement because the warranty had expired, but agreed to send the radio back to Sony with our explanation of the problem. And within two weeks we were told that Sony had agreed to replace the item. A good news story indeed!

Last year I had a similar experience with a new watch. After six months a link fell out of the bracelet. On returning it to the jeweller I was advised that the 12-month guarantee only covered the mechanical works inside the watch, not the bracelet. However, once again, they agreed to return it to the manufacturer, and the watch was returned with the bracelet repaired free of charge.

It appears that at least some manufacturers are willing to do the

right thing, and consumers shouldn't feel they have no recourse because warranties have expired or don't appear to cover certain parts. As you frequently remind us in your magazine, goods should be fit for sale and should last more than a few months.

Barbara Gilchrist
Leopold, Victoria

Thanks for sharing these good news stories with us and other consumers. More experiences like these are summarised below. So if you've had a positive outcome to a complaint you took to a manufacturer, retailer, importer or tradesperson, let us know. Address your letters and emails to 'Thumbs up' at the address on page 2.

THUMBS UP!

🐾 Sandra Godwin of Bundaberg, Queensland, awards a hearty thumbs up to **UNCLE BEN'S**, which sent her "a lovely letter" as well as a cheque to reimburse her for 10 cans of **My Dog** dog food, which her dog had refused to eat.

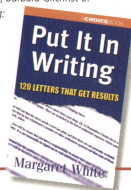
🐾 Also from Sandra Godwin, thumbs up to **ORIENTAL MERCHANT**, which sent her several packets of an alternative brand of noodles "of superior quality" to the **Chef's World Udon Noodles**, which had gone mouldy before the use-by date. The importers also advised they'd improve the packaging to prevent such problems.

🐾 Julie Lange of Williams, WA, gives a thumbs up to **DARRELL LEA**, which sent her a letter of apology and gift tokens to the value of \$15 after she returned a piece of a specialty Easter egg that appeared to her to be discoloured and taste inferior to other, cheaper Easter eggs, and which her son had gone out of his way to buy following a TV ad.

Letter of the month

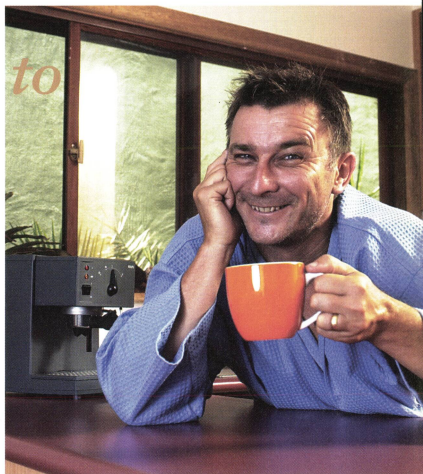
We want to hear from you — your experiences help our research and often let other readers know about scams and rip-offs. To thank you for writing to us, *Your Letters* awards a prize of a CHOICE book to the 'Letter of the month'. This month's winner, Barbara Gilchrist of Leopold, Victoria, receives *Put it In Writing: 120 letters that get results*, or any other book of her choice from *Consumer Bookshelf*, pages 28 to 30.

We're sorry we don't have the resources to answer all your letters personally, and in the magazine we may edit them or print only an extract. See page 2 for how to reach us.



Waking up to fresh java

On test: espresso machines selling for around \$130 to \$500. The most expensive makes the best coffee, and there's a real difference between the types.



IN BRIEF

■ We tested two types of espresso machine — pump and steam — and the pump type definitely makes much better coffee. None of the three steam machines produced good espresso with crema.

■ None of the machines tested received the highest possible scores from our experts for the taste of the espresso. So for that perfect cup, your local coffee bar may still be your best bet.

DO YOU NEED AN ESPRESSO TO make it through the afternoon, or a huge *caffè latte* to get you through the Saturday papers in bed? A home-style espresso machine may be what you need.

Different types of machine ...

Traditional espresso coffee is strong and slightly bitter. The espresso machine forces hot water, at a specific temperature, through finely ground coffee to extract the flavour and aroma.

For a good cup of espresso or cappuccino, you need an espresso machine with a pump or pump thermoblock system. These are generally more expensive — those we tested sell for around \$250–\$500, compared with around \$130–\$170 for the steam machines tested. But the added expense seems to be worth it if you want to make good Italian-type coffee.

■ A **pump** machine operates at higher pressure than a steam machine and has a thermostat to control the water temperature. The pump operates both to make coffee and froth milk, so you can switch directly from one to the other. Two of the pump machines in the test have a thermoblock, which is claimed to heat up the water quickly to the right

temperature for making coffee or frothing milk, but only one of these worked faster than the others — and we couldn't see any other differences in performance.

The pump machines in this test have large, removable water tanks, which are easy to fill and enable you to make several cups of coffee consecutively without having to refill the tank. You can also froth milk or other drinks without making coffee first.

■ A **steam** machine has a fairly simple design. It's smaller and lighter, and relatively easy to use and keep clean. But none of the steam machines tested produced any crema (creamy froth) on the espresso because they operate at relatively low pressure. Achieving full-flavoured coffee, and with it the tiny bubbles, oils and caramelised sugar that make up

WHAT TO BUY

KRUPS Novo 2100 Plus 962	\$489
KENWOOD Cremissimo ES 421	\$249



A couple of other espresso machines were easier to use, but these two made the best coffee. The **KRUPS** scored highest overall, but it's also the most expensive.

the crema, demands higher pressure.

One machine in the test (the RUSSELL HOBBS Café Continental 3344) has a 1.1 L drip-filter coffee maker on one side and a steam-driven espresso maker with a milk-frothing nozzle on the other. We tested its espresso-making ability with the steam system. It achieved one of the lowest scores for making coffee in the steam-driven part of the machine (we didn't test the drip-filter part), as well as the lowest score for frothing milk.

... produce coffee of different quality

Four experts tasted and evaluated the espresso each machine made — see *The experts*, page 12, for more on the taste test. They awarded points for the aroma, flavour, 'mouthfeel' and aftertaste of the coffee and the crema colour and thickness.

The two steam machines and the combined drip-filter/steam model scored lowest in the taste test. They produced no crema at all, which downgraded their tasting scores to just 15–25%. (The taste test scores form part of the coffee-making score — see note 7, page 13.) Crema is an absolute must in a true espresso, so an espresso machine should be able to produce it — see *The perfect crema*, right.

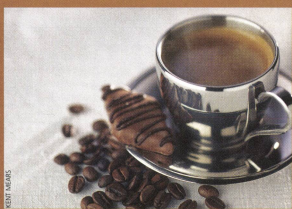
The pump machines received the experts' highest scores in the taste test, ranging from 50–75%.

Typical comments on the quality of coffee produced in these machines included: "excellent espresso", "superior cup", "excellent crema", "pleasant to drink" and "great appearance".

However, despite these relatively good scores and comments, none of the machines received the highest possible scores for most attributes the tasters were looking for in espresso, except for crema colour and thickness. So for that perfect cup you might still have to visit a good coffee shop.

A few words about coffee

Even the most sophisticated espresso machine could let you down if you use the wrong blend of coffee, too much of it, or the wrong grind. So experiment a bit. Try a few blends from those recommended for your coffee maker until you find one you like. Espresso machine manufacturers usually



The perfect crema

When you had your first cup of good espresso, you may have wondered about the creamy, pale golden froth on top of the dark brown coffee — the crema. It's perhaps the most important thing that distinguishes espresso from other types of coffee.

Crema is actually caramel. The high temperature and pressure in an espresso machine caramelise the sugar naturally present in the coffee, aerate it and expel it with the espresso.

Perfect crema should be thick and stable, and preserve the coffee flavour, aroma and temperature. It can also help you diagnose where your espresso-making could have gone wrong.

- If it's light, inconsistent, thin and dissipates quickly, the coffee has been underextracted; it was probably too coarsely ground or the water temperature was too low.
- If it's dark and has a hole in the middle, either too much coffee was in the filter basket or it was compacted too firmly.
- If it's white and has big bubbles, the coffee was probably overextracted because the water temperature was too high.
- If it's just a white spot in the middle of the cup, the coffee was probably overextracted because it percolated for too long.
- If you still can't get good crema after fixing all that, check whether the coffee chamber is dirty.

recommend using an Italian-style (espresso) blend — darkly roasted and finely ground.

Experiment with the grind, too. If it's too fine, it can clog up the filter basket and won't let the water come through. Too coarsely ground coffee, on the other hand, produces a watery, weak coffee and poor crema.



RHONDA THWAITE

RHONDA THWAITE

PROFILES

Profiles are of the models in the *What to buy* list, in rank order. Prices shown are recommended retail; you may find cheaper when shopping around.

KRUPS NOVO 2100 PLUS 962

RRP: \$489

GOOD POINTS

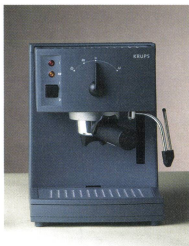
- Made the best coffee in the test.
- Removable water tank with a handle at the top for easy filling.
- Removable drip tray for easy cleaning.
- Cup warming plate.
- 'Ready' light for coffee and frothing milk.
- Controls are easy to use.

BAD POINTS

- The pressure for frothing milk is a little low, so it's a bit harder to 'bring up' the milk in the jug.
- There are some sharp edges on the drip tray and warming plate.
- The most expensive machine in the test.

TASTERS' COMMENTS

"A very good machine, which runs at good temperature and pressure."
"Excellent crema."



VANESSA MARSHALL

KENWOOD CREMISSIMO ES 421

RRP: \$249

GOOD POINTS

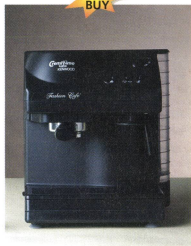
- Made the second-best coffee in the test.
- Froths milk well.
- Removable water tank for easy filling.
- Removable drip tray for easy cleaning.
- 'Ready' light for coffee and frothing milk.

BAD POINTS

- Produced the lowest-temperature coffee.
- The steam release pushbutton has to be held down while frothing milk, which isn't as easy to use as turning a knob.

TASTERS' COMMENTS

"Excellent espresso."
"Pleasant to drink."



BEST BUY

VANESSA MARSHALL

What about the rest?



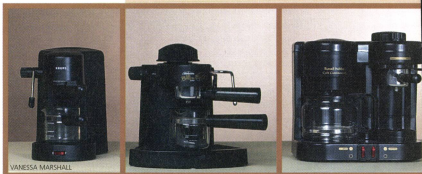
VANESSA MARSHALL

The following three espresso machines (pictured above), with a pump system, produced reasonable-quality coffee in this test.

- The **SUNBEAM Club Cappuccino PC120A** (left) produced coffee with good crema. It's the easiest to use of the machines tested and the fastest to make the first two cups of coffee (in one-and-a-half minutes).
- The **GAGGIA Espresso** (middle) produced particularly good milk froth and coffee with good crema, but is the slowest to make coffee (the first two cups took six-and-a-half minutes) and expensive (around \$400).
- The **DELONGHI L'Espresso Bar M290** (right) came second for ease of use — milk-frothing is particularly easy, although the froth itself didn't expand enough due to low pressure. However, it produced coffee with little crema that dissipated very quickly.

The three steam machines (pictured below) didn't make a decent espresso.

- The **KRUPS Bravo 871** (left) and **SUNBEAM Club Cappuccino PC100A** (middle) are both good for frothing milk and are relatively cheap to buy, but they can't produce Italian-style espresso with good crema. In fact, the **SUNBEAM** produced the worst-tasting coffee in the test. (The tasters commented that the filter holder, filter basket and plastic seal smelt bad, which could have caused the coffee's bad flavour.)
- The **RUSSELL HOBBS Café Continental 3344** (a steam espresso machine combined with a drip-filter coffee maker, right) didn't produce good espresso either. And it scored lowest for frothing milk and ease of use.



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WHAT TO LOOK FOR

- A pump or pump thermoblock machine is a must if you want to:
 - (a) Make Italian-style espresso with a good crema (see *The perfect crema*, page 9). None of the steam machines tested produced any crema.
 - (b) Make consecutive cups of espresso. Steam machines get quite hot and should cool down between cups.
 - (c) Froth milk (say for hot chocolate) without making coffee.
 With most steam machines (except for the **KRUPS Bravo 871**) you have to make coffee first.
- A removable water container makes filling the machine easier.
- A removable drip tray is easier to keep clean.
- Look for easy-to-clean surfaces (no cracks or grooves).
- Controls should be easy to use.
- The filter basket holder should hold the basket securely in place and be easy to clean.



VANESSA MARSHALL

What'll it be?

If you don't frequent the 'caffè latte belt' in your nearest city and aren't familiar with Italian coffee, you may not know your macchiato from your ristretto. Here are a number of different coffee variations you can make with an espresso machine.

- **Espresso** is 40–45 mL of coffee with a good crema on top, made from about 7–8 mg of fine, dark-roasted coffee and served in a demitasse. (In Australia, 60 mL is also a common measure for an espresso.)
- **Short black** (also called **ristretto** or **short espresso**) is similar to espresso, but with a more concentrated aroma and flavour—the water flow is cut short at about 20–30 mL.
- **Long black** (or **long espresso**) is the standard espresso with added

hot water to make it up to 90 mL and served in a cappuccino cup of about 150 mL. Don't let the added hot water run through the ground coffee—it'll make it taste bitter.

- **Double espresso** is two measuring spoons of coffee used to make 90 mL (or 120 mL) of espresso.

■ **Macchiato** is an espresso with one spoonful of milk froth on top.

■ **Cappuccino** is served in a cappuccino cup of about 150 mL. It consists of one third espresso and two thirds hot froth and steamed milk, which is either poured directly into the espresso (the Italian way) or, as is done in Australia, separated into hot steamed milk, which is added first, and froth, with which the cappuccino is topped, before it's sprinkled with powdered chocolate.

■ **Caffè latte** contains more milk than coffee. Depending on your taste, you can make it with one or two espressos and then fill the glass with hot steamed milk and a minimum of froth. It's usually served in a *latte* glass of about 250 mL.

■ **Caffè mocha** consists of a standard espresso mixed with the same amount of strong, hot drinking chocolate and topped with hot frothed milk. It's served in a mug or glass.

■ **Viennese** (or **Vienna coffee**) is a standard or double espresso with a dollop of whipped cream, sprinkled with grated dark chocolate and served in a cappuccino cup.

(Adapted from the Krups training manual *Coffee for the connoisseur. A guide to the selection and preparation of coffee.*)



RHONDA THWANE

ESPRESSO MACHINES

1

2

3

Brand / model (in rank order)

KRUPS Novo 2100 Plus 962

KENWOOD Cremissimo ES 421

SUNBEAM Club Cappuccino PC120A

GAGGIA Espresso

DELONGHI L'Espresso Bar M290

KRUPS Bravo 871

SUNBEAM Club Cappuccino PC100A

RUSSELL HOBBS Café Continental 3344

Manufacturer / distributor	Origin	Price (\$)*	Warranty (years)	Type	Capacity (cups, min / max)	Cup-warming area	Cord storage	Time to make first two cups (minutes:seconds)
Krups	Portugal	489	1	Pump thermoblock	1 / 2	✓	✓	4:00
Kenwood	Italy	249	1	Pump	1 / 2			2:00
Sunbeam	China	266	1	Pump thermoblock	1 / 2	✓	✓	1:30
Gaggia	Italy	400	1	Pump	1 / 2			6:30
Parex	Italy	349	1	Pump	1 / 2			5:00
Krups	Mexico	129	1	Steam	2 / 4		✓	3:00
Sunbeam	China	128	1	Steam	2 / 4		✓	3:00
Russell Hobbs	China	169	1	Filter / steam	2 / 4		✓	2:30

* Recommended retail price.

The experts

Our thanks go to the experts who gave their time and expertise to taste and evaluate espresso made in the eight machines on test. They awarded points for the aroma, flavour, 'mouthfeel' and aftertaste of the coffee and the crema colour and thickness. Their averaged scores formed 70% of the coffee-making score.

Pictured, from top to bottom, left to right are:

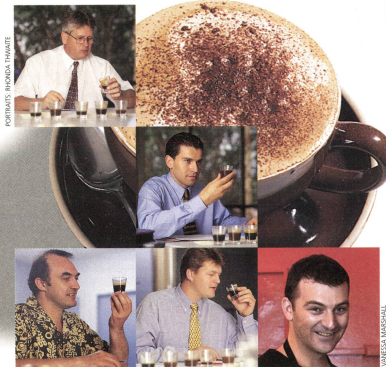
■ Wayne Archer, coffee development manager with Douwe Egberts Coffee (Harris, Moccona, Piazza d'Oro and Douwe Egberts).

■ Alfredo Pasquariello, sales supervisor with Cantarella Bros (Vittoria).

■ Steve Manfredi, chef/restaurantier; owner of bel mondo restaurant, Sydney.

■ Lance Witham, managing director of Witham's Coffee.

We'd also like to thank Martin Lewis (pictured far right) of Martini Catering in Newtown, NSW, who assessed the machines' milk-frothing ability. His scores are listed separately in the table above right and form 10% of the overall score.



PORTRAITS: RICCARDO THARATE

VANESSA MARSHALL

Hot froth to top it off

Thick, dense and shiny milk froth tops off the perfect cappuccino. With all the machines in our test you can froth milk, but with most steam machines (except for the **KRUPS Bravo 871**) you have to make coffee too; you can't just froth milk, say for hot chocolate.

Making the perfect milk froth takes some practice and experimentation. The hints below should help you get a good froth consistently.

■ Fresh, full-cream milk is best suited for frothing. Light or skim milk froths dissipates sooner because it's more aerated and has larger, less stable bubbles.

■ Pour fresh cold milk into a jug to just less than half full. A stainless steel jug is best: when it gets too hot to hold, the milk froth is ready.

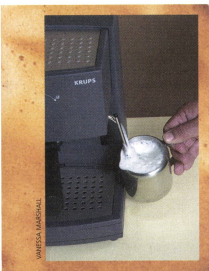
■ Turn on the steam control switch for a few seconds to release any built-up steam and water, then place the steam nozzle into the jug just below the surface of the milk.

■ Angle the jug slightly and turn on the steam to full pressure.

■ Move the jug around the nozzle — create a whirlpool effect.

■ Froth the milk until small bubbles have formed and the milk has almost doubled in volume.

■ Holding the jug by the handle, plunge the nozzle to the bottom and heat the milk (but don't let it boil) until the jug gets too hot to touch. Your frothed milk is ready.



VANESSA MARSHALL

1	5	6	7	8
Price	Milk-frothing score (%)	Ease of use score (%)	Coffee-making score (%)	Overall score (%)
60	76	75	74	
70	70	69	69	
60	82	63	68	
90	70	62	67	
60	80	57	64	
70	74	43	55	
70	74	35	50	
50	62	37	46	

All the machines tested are safe to use. They all passed our electrical safety tests and none of the control knobs and filter basket handles get too hot to touch.

1 Type

Espresso machines with a pump (or pump thermoblock) system generally produce espresso with a good crema. The steam machines we tested don't — but they're less expensive. All machines tested can froth milk.

2 Cord storage

A tick in this column indicates that you can coil excess cord underneath or put it into a cavity, avoiding bench clutter and making the machine safer to use.

3 Time to make first two cups

This is the time it took us (rounded to the nearest 30 seconds) to make the first two cups of espresso (120 mL in total, the usual size of two Australian espresso cups). It includes the time it takes the machine to warm up.

With a pump machine you can make subsequent cups of coffee straightaway, and it usually takes much less time than the first lot. With a steam machine, however, it's much safer to let it cool down first before making more coffee.

4 Coffee temperature

This is the temperature of the coffee in the cup or jug after stirring for five seconds. An espresso machine should be able to make coffee with a drinking temperature of at least 70°C. The temperature can vary depending on factors such as the amount of coffee and how tightly packed it is, or when you make several cups one after the other.

5 Milk-frothing score

A coffee shop owner and expert in frothing milk helped us evaluate the machines' milk-frothing ability. We assessed the quality of the froth and how easy it was to create it ('bring it up' in the milk jug).

6 Ease of use score

We assessed how easy it is to fill the reservoir with water and the filter basket with coffee, froth milk, operate the controls and clean the machine. All aspects are weighted equally.

7 Coffee-making score

This score consists of:

- Taste test (for details see *The experts*, far left): 70%.
- Temperature (for details see note 4, left): 15%.
- Time (for details see note 3, left): 15%.

8 Overall score

The overall score consists of:

- Coffee-making: 60%.
- Ease of use: 30%.
- Milk-frothing: 10%.

Brand / model (in rank order)

KRUPS Novo 2100 Plus 962

KENWOOD Creminissimo ES 421

SUNBEAM Club Cappuccino PC120A

GAGGIA Espresso

DELONGHI L'Espresso Bar M290

KRUPS Bravo 871

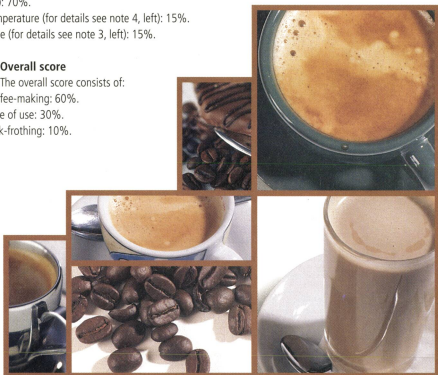
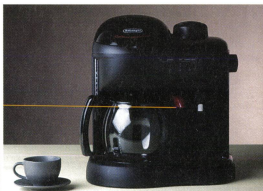
SUNBEAM Club Cappuccino PC100A

RUSSELL HOBBS Café Continental 3344



THE ODD ONE OUT

Its name — **Coffeacappuccino Bar** — suggests you can make cappuccino in the **DELONGHI DC300**, but far from it. After buying it for this test we found it can only make drip-filter coffee (not Italian-style espresso) with milk froth on top. And its milk-frothing ability is pretty poor. When we tested it, the milk was too hot and burnt, and there was hardly any froth. So don't bother with this one if you want to make cappuccino.



Saucy!

A ready-made sauce not only helps make a yummy meal, it's a godsend when you're in a hurry. But watch the salt.

PHOTOS: VANESSA MARSHALL

IN BRIEF

■ As a quick, easy to prepare meal, the simmer sauces we looked at aren't too bad nutritionally as an occasional meal. But they're mostly too high in salt to be eaten regularly.

■ As a group, pasta sauces are better nutritionally than most simmer or stir-fry sauces (see *Other sauces*, far right).

HAVE YOU EVER STOOD IN FRONT of a supermarket shelf full of ready-made sauces, wondering which of the dozens there would go best with that chicken you just picked up for an easy dinner? It's mind-boggling — we found more than 300 on the shelves, from simmer sauces to stir-fry and pasta sauces. Satay, apricot, tandoori — how do you choose one that's OK nutritionally?

The table on page 16 will help you choose a quick and healthy meal. Because of the size of the market, it's focused on simmer sauces, but there's a snapshot impression of the stir-fry and pasta sauces as well (see far right).

A good meal choice?

You generally add these sauces to cooked meat or vegetables, and leave them to simmer for anything from five to 40 minutes. Having a ready-made sauce is much less work than making one from scratch.

■ We were pleasantly surprised to find they aren't terribly high in fat. (For a full nutritional breakdown of them all, see the table.) Only four are more than 10% fat: **CHICKEN TONIGHT** Golden Honey Mustard, the two **TAYLORS** flavours and **ASIA AT HOME** Satay Stir-thru Sauce. But a number are around 8–10%, so you'd want to avoid them too as a regular addition to your shopping trolley.

■ Next comes **sugar**. While it may not be the demon we once thought, it does contribute to tooth

decay and to your overall calorie intake, so you shouldn't get too complacent about how much you eat. For more on sugar and its health implications, see *Sugar: no longer a bad guy?*, **CHOICE**, September 1998. It's also on our website: go to www.choice.com.au and type 'sugar' in the search box.

Eight of the sauces are 20% or more sugar. Of these, **YACKANDANDAH** Lemon, Honey & Ginger, **Spicy Plum**, **Mongolian Hotpot**, **Honey Soy** and **Teriyaki & Sesame Sauce** are all 29–30%. That's way too many calories coming from sugar for you to end up with a balanced diet.

■ Now comes the really bad news. The **sodium** content of most of these sauces is too high. (Sodium is the component of salt — sodium chloride — that's responsible for high blood pressure.) All but seven of them contain between 20% and 98% of the upper recommended limit for your daily intake of sodium. When you consider this comes from only part of one meal, it doesn't leave much room for any salt you eat for the rest of the day. See *Salt — the bad guy*, page 16, for why you should watch your sodium intake.

The rest of the meal

Serve the sauces with a helping of brown rice or noodles to boost your fibre intake. And more vegies than meat should add the rest of the bulk to the meal.

How to spot fat, salt and sugar

Unfortunately, without a nutrition information panel (which is going to be mandatory from 2002, following a review of the Food Standards Code), you may have to choose a sauce with no nutrition information to guide you. Here are some tips on how to spot fat, sugar and salt.

Fat

- A sauce with the word 'creamy' or 'butter' (like butter chicken) in the name usually means higher fat. Creamy sauces are generally based on fat-rich cream or coconut cream or milk which, like animal fat, is a saturated fat and best avoided. (Our test of coconut cream and milk — see CHOICE, June 2000 — found that brands called 'cream' don't necessarily contain more fat than ones called 'milk'. The names are used interchangeably.)

- Satay sauces are usually at the higher end of the fat spectrum because of the fat from peanuts, and sometimes coconut cream as well.

- If in doubt, check the ingredients list. By law, they must be listed in order of highest proportion to lowest (except for water, which can be at the end regardless of amount). If cream, vegetable oil or coconut cream or milk is one of the first ingredients listed, it's a fair assumption that the sauce will be higher in fat. (Following the overhaul of food standards, by 2002 water will have to be listed in its correct position, by weight, in the ingredients list.)

- Non-creamy sauces such as fruit-based ones like apricot or tomato are generally lower in fat.

- Remember that the sauce is only one part of the meal — adding meat will increase the fat content, so make sure you choose lean meat and trim off any visible fat.

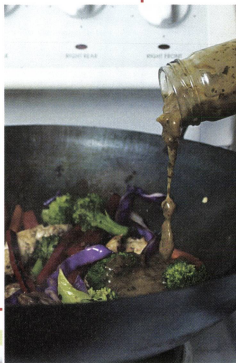
Sugar

- Sauces with 'sweet and sour' or 'honey' in the name are generally higher in sugar.

- Check the ingredients list for sugar and honey. Remember that golden syrup, treacle, fructose and glucose syrup are all forms of sugar as well (these types of sugar are more common in stir-fry than in simmer sauces).

Salt

- While you can be fairly sure a sauce with 'black bean', 'teriyaki' or 'soy' in the name is going to be high in salt (mainly from the added soy sauce), you can't be sure other types aren't. Our analysis shows that almost all the sauces are high in salt, regardless of type. Check the ingredients list for salt (the higher up the list the more there is) and soy, oyster and fish sauce.



Other sauces

- **Stir-fry sauces:** These are added to meat or vegetables and heated quickly for a few minutes before serving. As a group they're fairly comparable in nutrition content to the simmer sauces. Follow the guidelines above for them to choose a stir-fry sauce.

- **Pasta sauces:** The majority of pasta sauces are tomato-based, but there are creamy ones as well.

As a group, pasta sauces are the best nutritionally. Although sugar is usually added to the tomato-based ones to balance the acidity, we didn't find any with more than 10% sugar.

When it comes to fat, again the tomato-based ones generally have very little (around 1–2%); a couple of the creamy ones have more than 10%. One brand to watch out for is the **LEGGO'S Stir Through** range, with about 10% fat (higher than you'd probably expect).

In the salt stakes, the pasta sauces are definitely better as a group than the others, with 23 of the ones we looked at having less than 20% of the upper recommended daily limit for sodium in a serve. However, check the nutrition information panel (when there is one) before buying a sauce because there are still plenty that are too high in salt to be recommended.



SALT: THE BAD GUY

Sodium has been linked with a number of conditions, including osteoporosis, kidney stones and fluid retention (to name a few), but its effect on blood pressure is of most concern.

Even if you don't currently have high blood pressure it doesn't mean you won't later on in life. Almost 50% of all older Australians develop it, and most experts believe this increase in blood pressure with age would be less if we ate less sodium.

Don't assume you're not sensitive to sodium — some experts believe it's common, and as there's no test, it's safest to assume you are.

Blood pressure drugs can have side effects, so not needing them is the best situation to be in.

For more on salt, see *Salt — should you cut down?* in CHOICE, July 2000, or go to our website to read it (www.choice.com.au and search for 'salt').



SIMMER SAUCES

Brand / product (in ascending order of sodium as % of RDI per serve)

	Energy (kJ / Cal per 100 g)	Fat (%)	Sugar (%)	Sodium (mg per 100 g)	Sodium (% RDI per serve)*
YACKANDANDAH Lemon, Honey & Ginger	760 / 182	3	30	120	7
FIRST CHOICE Green Thai Curry	270 / 65	4	2	140	8
YACKANDANDAH Thai Satay	650 / 155	9	17	140	8
CONTINENTAL Recipe Sauce Thai Peanut Curry	420 / 100	6	5	300	17
CHICKEN TONIGHT Chicken Cacciatore	240 / 57	2	6	340	19
CHICKEN TONIGHT LITE Creamy Tandoori	280 / 67	3	3	350	19
CONTINENTAL Recipe Sauce Creamy Parmigiana	330 / 79	5	4	350	19
CHICKEN TONIGHT LITE Golden Honey Mustard	360 / 86	5	5	370	20
CHICKEN TONIGHT Golden Honey Mustard	590 / 141	11	5	380	21
CHICKEN TONIGHT Herbed Chicken with Wine	290 / 69	5	2	390	21
PATAK'S Butter Chicken	540 / 129	7	11	390	21
CHICKEN TONIGHT Creamy Tandoori	420 / 100	7	5	410	22
FIRST CHOICE Country Mushroom	350 / 84	6	1	400	22
PATAK'S Korma	340 / 81	5	2	410	22
PATAK'S Tandoori Masala	380 / 91	2	6	410	22
SHARWOOD'S Kalana	370 / 88	2	10	410	22
CHICKEN TONIGHT LITE Creamy Chicken with Mushrooms	250 / 60	4	1	420	23
CHICKEN TONIGHT Country French Chicken	420 / 100	9	2	430	23
CONTINENTAL Risotto Sauce for Sweet Corn & Chives	520 / 124	6	5	420	23
CONTINENTAL Recipe Sauce Stroganoff	440 / 105	9	1	430	23
FIRST CHOICE Sweet & Sour	480 / 115	0	23	420	23
RAGULETTO Italian Cooking Sauce for Chicken Boscaiola	440 / 105	9	1	430	23
CHICKEN TONIGHT Thai Red Curry	380 / 91	6	5	440	24
PATAK'S Balti	260 / 62	4	3	440	24
CHICKEN TONIGHT Apricot Chicken	240 / 57	1	9	460	25
CHICKEN TONIGHT Creamy Lemon Chicken	470 / 112	9	4	460	25
RAGULETTO Italian Cooking Sauce for Beef Roma	230 / 55	0	7	460	25
RAGULETTO Italian Cooking Sauce for Mediterranean Vegetables	230 / 55	1	9	460	25
CHICKEN TONIGHT Curried Chicken with Vegetables	200 / 48	2	3	480	26
CONTINENTAL Risotto Sauce for Tomato, Basil & Chilli	200 / 48	1	6	470	26
PATAK'S Rogan Josh	270 / 65	3	4	480	26
CHICKEN TONIGHT Butter Chicken	460 / 110	8	4	490	27
CONTINENTAL Risotto Sauce for Creamy Mushroom	320 / 76	7	1	500	27
LEGGO'S Italian Cooking Sauces Beef Osso Burco	180 / 43	2	1	500	27
FIRST CHOICE Peanut Satay	600 / 143	10	6	510	28
FIRST CHOICE Tandoori	400 / 96	5	4	520	28
RAGULETTO Italian Cooking Sauce for Chicken Parmigiana	230 / 55	1	10	510	28
CONTINENTAL Recipe Sauce Hungarian Goulash	270 / 65	3	4	540	29
FIRST CHOICE Apricot Chicken	360 / 86	0	14	550	30
SHARWOOD'S Creamy Korma	590 / 141	10	4	550	30
YACKANDANDAH Spicy Plum	630 / 151	2	29	550	30
YACKANDANDAH Tandoori (Tikka)	390 / 93	3	9	570	31
YACKANDANDAH Mediterranean	420 / 100	4	9	590	32
LEGGO'S Italian Cooking Sauces Chicken Scallopini	380 / 91	7	1	600	33

SIMMER SAUCES continued

1

Brand / product (in ascending order of sodium as % of RDI per serve)

Brand / product (in ascending order of sodium as % of RDI per serve)	Energy (kJ / Cal per 100 g)	Fat (%)	Sugar (%)	Sodium (mg per 100 g)	Sodium (% RDI per serve)*
PATAK'S Tikka Masala	370 / 88	5	4	610	33
SHARWOOD'S Tenggai Mild Medium	440 / 105	8	4	630	34
THE CURRY MAKERS Korma Curry Mild	630 / 151	9	9 (A)	620	34
THE CURRY MAKERS Madras Curry Medium	650 / 155	8	9 (A)	630	34
THE CURRY MAKERS Vindaloo Curry Hot	560 / 134	8	9 (A)	620	34
ASIA AT HOME Red Curry Stir-thru Sauce	530 / 127	9	8	640	35
CONTINENTAL Risotto Sauce for Pumpkin & Tomato	240 / 57	1	6	670	36
SHARWOOD'S Tandoori Makhani	330 / 79	5	3	740	40
YACKANDANDAH Mongolian Hotpot	580 / 139	3	29	730	40
LEGGO'S Italian Cooking Sauces Chicken Cacciatore	190 / 45	2	1	750	41
RAJ MASALA Balti Curry	570 / 136	9	5	780	42
RAJ MASALA Butter Chicken	570 / 136	9	5	780	42
RAJ MASALA Kashmiri Korma	570 / 136	9	5	780	42
RAJ MASALA Rogan Josh	570 / 136	9	5	780	42
RAJ MASALA Tikka Curry	570 / 136	9	5	780	42
SHARWOOD'S Sambar Mild	570 / 136	9	6	770	42
THE CURRY MAKERS Bombay Curry Medium	630 / 151	8	9 (A)	790	43
ASIA AT HOME Satay Stir-thru Sauce	790 / 189	12	11	810	44
THE CURRY MAKERS Roghan Josh Curry Medium	630 / 151	9	9 (A)	810	44
YACKANDANDAH Bushies BBQ	670 / 160	2	27	810	44
SHARWOOD'S Mild Jalfrezi	330 / 79	3	7	830	45
THE CURRY MAKERS Butter Chicken	960 / 229	7	10 (A)	830	45
LEGGO'S Italian Cooking Sauces Chicken & Mushroom Risotto	380 / 91	7	1	880	48
SHARWOOD'S Spicy Tikka Masala	400 / 96	6	3	900	49
FIRST CHOICE Cacciatore	340 / 81	3	7	920	50
YACKANDANDAH Honey Soy	760 / 182	3	30	980	53
YACKANDANDAH Teriyaki & Sesame	760 / 182	3	30	980	53
FIRST CHOICE Tikka Masala	320 / 76	2	4	1000	54
TAYLORS Chicken Gourmet Honey Macadamia	1040 / 248	17	20	1050	57
LEGGO'S Italian Cooking Sauces Genovese Pesto Chicken	240 / 57	2	3	1080	59
TAYLORS Chicken Gourmet Peanut Satay	1140 / 272	15	23	1320	72
YACKANDANDAH Black Bean	450 / 108	2	12	1800	98

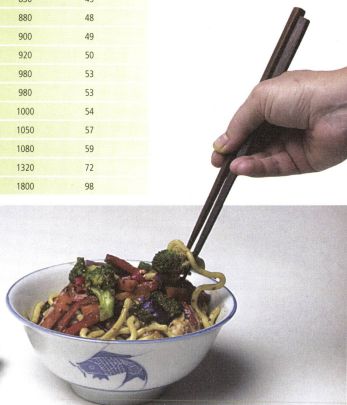
Figures are rounded as follows: kilojoules and sodium to the nearest 10; Calories, fat, sugar and % RDI* to the nearest whole number.

* Serve size: 125 g, based on the average serve size recommended on labels.

(A) These figures are for total carbohydrate, so aren't necessarily all sugar. They may include carbohydrate from thickeners as well.

1 Sodium RDI (% per serve)

The recommended daily intake (RDI) of sodium for adults ranges from 920 mg to 2300 mg. It's the percentage of the upper (2300 mg) RDI that we've listed.



Could you retire at 50?

Prepare to take risks.

If you juggle your finances carefully and take some investment risks you might be able to say goodbye to your boss well before your 65th birthday

IN BRIEF

■ Especially if you're currently on a higher than average income, want to travel and don't want to have to lower your standard of living much in retirement, you can't rely on the pension and the super benefit from your employer alone.

■ We sent people in four different situations to financial advisers to see whether they could manage to retire at 50. It's not simple: if they're prepared to accept risks, their investments perform as expected, their circumstances don't change, they start now and they're disciplined, they can all retire fairly early and in comfort — though some of them not quite at 50.

WHILE RETIRING AT 50 MAY ONLY be a dream, retiring early is quite achievable: you don't need to win Lotto or marry a millionaire.

However, you need to have a plan and start saving as early as possible.

Australians are living longer and there are relatively fewer younger people to pay the taxes that fund our pensions. And the number of people aged 65 and over is expected to almost double from 2.2 million in 1995 to over four million in 2021.

The Australian government has already raised the age at which you're eligible for a pension and when you can receive your super money.

■ Pension age for women is progressively changing, so that by January 2014 it'll be same as for men — 65. Until then, the qualifying age for women depends on their date of birth: women born after January 1949 qualify for an age pension only after they're 65.

■ If you were born before July 1960 you'll still get your super money at 55 (provided you retire at that age). For younger people the entitlement age is gradually being raised: those born after June 1964 will only get their super at 60.

The risks you take

To retire early is an ambitious goal. To achieve it you'll probably have to invest aggressively and take risks. For example, three of our case studies were advised to borrow money to invest — a very risky strategy that can get you in a lot of trouble if the unexpected happens, such as losing your job or, in the case of a young family, having another child. To decide on an investment strategy that's appropriate for you, you need to think carefully about what risks you can cope with, and get professional advice.

Borrowing money to invest

Borrowing money to invest is called 'gearing'. The theory is that by borrowing you can invest more and so increase any profits on your investment. The downside is that your losses are also magnified, and if you lose the money invested you still have to repay the loan, which can lead to difficulties or even bankruptcy.

So investing borrowed money is quite risky: a good idea is to imagine the worst-case scenario. Could you cope:

■ If the interest rate suddenly went up, increasing your loan repayments?

The really bad news is that the age pension and the super money contributed by your employer will most probably not fund on their own the lifestyle you want in your retirement.

So how can you still get that early retirement?

How much money do I need to retire?

The first thing to work out is how much money you need in your retirement. Unfortunately, there's no one answer to this for all retirees. It depends on your needs and expectations.

The financial advisers asked our case studies to work out their current income and expenses, and the expenses they expect to have when they retire.

To help work out your budget, CHOICE has a budget sheet at www.choice.com.au (just go to 'toolkit' under CHOICE Cuts on the home page and click on the link). Or you can easily draw up your own, listing income and expenditure now as well as what you'd expect them to be when you retire. Or contact the National Information Centre on Retirement Investments (NICRI) on 1800 020 110 or (02) 6281 5744 for its free *Income and Expenditure Sheet*.

The Association of Superannuation Funds of Australia (ASFA) suggests you'll need about 60% of your pre-retirement gross income for a "modest but adequate" lifestyle. According to ASFA, most people need to save on top of the normal super contributions to achieve this. For calculations for people on three different incomes, see page 21.

Continued on page 20

- If instead of growing, your investments made a loss for a time?
- If you lost your job?

If not, don't do it. Markets move in cycles: the sharemarket may well be performing poorly when interest rates are high and vice versa. You have to be able to cope with these cycles and still meet your debt commitments when your investments aren't paying you much.

Whether borrowing to invest is suitable for you depends on your personal circumstances — for example, have you got enough excess income to cover potentially higher debt repayments and, especially, how much risk can you cope with? It's very important to get professional advice. And never jump into an investment purely for the tax advantages — always check its intrinsic merits too.

If you borrow to invest, the financial advisers we spoke to recommend taking out income protection insurance in case you ever can't work because you're sick, and covering your dependants by taking out life insurance.

Share investing

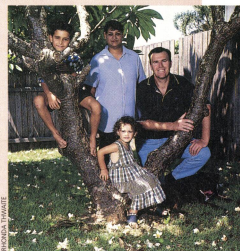
Over the longer term, a balanced investment including shares tends to outperform more conservative investments. However, they're risky and have many ups and downs. To use them you need to have enough time for your investments to recover if the market goes down (as a rule of thumb, at least five to 10 years). You also have to be able to sleep at night even if the sharemarket just took a beating.

There'll be a more in-depth article on borrowing to invest in an upcoming issue.

Trade-off: security and comfort vs early retirement

Jack (32) and Marlene (30) Mackintosh* have two young children, Peter (seven) and Sonja (three).

Their house is worth around \$230,000 and they've managed to pay off a big chunk of their home loan, so they only owe \$85,000 on it. They also owe \$2500 on their two credit cards, \$6000 on a line of credit and \$13,500 on a car loan.



Their joint salaries are around \$70,000 before tax and they have around \$20,000 each in super. They also have about \$1800 in four different bank accounts. They'd like to retire in 2018 when Jack is 50. They'll need \$30,000 a year in today's dollars to fund their retirement, and one adviser we sent them to said they'd need a lump sum of \$637,500 to achieve this.

This adviser recommended closing at least two of the four bank accounts to save on fees, and consolidating all the debts into the home loan. Paying off the home loan as fast as possible should be the first priority.

It's hard to make projections about the future needs of any young couple, as their retirement is still a long way off. Over a time frame of nearly 20 years even small differences in inflation or interest rates can mean financial projections are significantly different from the actual returns on investment achieved. And Jack and Marlene's aims might change too — for example, they'd also like to upgrade their home.

One adviser recommended that they take out a \$70,000 loan secured against their house to invest in four different share funds. He said if all went well, they could then think about borrowing more money to invest (see *The risks you take*, left). If they embarked on this risky strategy, stayed out of credit card debt, and their investment performed as projected, the adviser said it should be worth more than \$300,000 in only 10 years' time, not including their super money. This would put them well on track to achieving their retirement goal.

However, as they're thinking of upgrading their home within the next five years, the second adviser recommended about borrowing to invest at this point, instead concentrating on paying off their home loan as quickly as possible and thinking about investments after that. A risky investment strategy based on very early retirement might compromise their interim security and comfort too much.

* Not their real names.

SUPER TIP

If you want to make a salary sacrifice, check whether your employer will then reduce the contributions they pay for you.

Legally they only need to pay 8% of your reduced salary, but they may agree to keep paying the same amount as before. Some even encourage employees to make a salary sacrifice by offering to put in extra money if they do.

Going it alone

Betty Smith*, 36, is single and lives with her seven-year-old son in a rented two-bedroom flat.

With a current income of around \$45,000, she estimates she could comfortably save at least \$150 per week; Betty's very disciplined and plans to get her savings on track. So far she's only saved to make expensive overseas trips, but now she wants to get a grip on her retirement savings. However, first she needs to pay off a \$9000 tax bill, due in a couple of months. One adviser suggested she apply for a personal loan to do this.

Betty needs her super entitlements to support herself in retirement and will only be able to receive them at 59. Based on that, she thinks she can retire at 62. She's

estimated that she'll need around \$1000 a week to live on (\$500 to \$600 in today's dollars). Currently she has \$17,500 in two different super accounts. One recommendation is to roll over the whole amount into one account to save on fees.

One adviser calculated that if Betty just relies on her employer's super contributions she'll only have a lump sum of around \$308,000, which wouldn't generate the income she needs. So they suggested she starts to save as soon as she's paid off her loan, and

recommended that when she's saved \$4000, she can start to put this money into managed funds. At the same time she'd progressively borrow more money to put in managed funds, so that eventually she'd have invested \$17,500 of her own and \$20,000 of borrowed money (see *The risks you take*, page 18, for the risks of this strategy).

The adviser also recommended she makes a monthly \$100 super salary sacrifice (see *Paying extra super*, above right). If she's prepared to take the risk of borrowing to invest and everything goes as the adviser expects, her investment and her super could generate an estimated lump sum of around \$730,000, giving her a retirement income of nearly \$1000 per week.

The second adviser suggested a less risky strategy, with Betty investing the \$600 a month that she saves into managed funds. Within five years she could have a substantial deposit on a home.

* Not her real name.

Continued from page 19

How it works

CHOICE sent people in four different situations to two financial advisers each to find out whether they'll be able to retire at 50. For all of them an early and comfortable retirement is possible if they're disciplined and put their financial plans into practice — but they won't all manage it by 50, and some of them would have to accept high risks. Our case studies (we've changed their names to protect their privacy) are:

■ Jack (32) and Marlene (30) Mackintosh (page 19) and their two children, Peter (seven) and Sonja (three). They're on average incomes and have paid off a large slice of their mortgage. They could retire at 50 if they accept the risks of borrowing against their home to invest, get their finances in order and their circumstances don't change — quite big ifs.

■ Betty Smith (36, left), a single mother with her seven-year-old son, Billy. She has to pay off a debt and hasn't got any substantial savings. However, she should still be able to fund her retirement when she's 62, if she embarks on a disciplined savings plan and takes some risks.

■ Claire (46) and Francesco (39) Lyon (page 22). They've paid off part of their mortgage but have only a small amount of savings. However, both earn high incomes and are keen to start investing. In 10 years they might be able to say goodbye to full-time work.

■ Brett (50) and Jeanette (42) Turner (page 23). Of their three children, only the youngest, Christine (16), still lives at home. They have their house as a nest egg and are paying off three investment units. They can probably retire in five years.

What can you do?

The financial advisers provided a lot of ideas for how our case studies could save the money for their retirement. After budgeting, the next step for all of them was to get their finances in order. Some examples are:

- Pay off your credit card(s) and stay out of credit card debt.
- Consolidate all your debts into your mortgage; if you don't have a mortgage, consolidate them into a personal loan.
- Close bank accounts you don't really need, to save on fees.
- Pay off your mortgage as quickly as possible.

Then:

- Make extra super payments (see above right).
- Borrow money to invest (see *The risks you take*, page 18).



PHOTO: THINART



The CHOICE Book *Before and After Retirement* can help you improve your retirement planning or keep in touch with recent changes if you've already retired. See page 30 to order it.

Paying extra super

The advisers recommended three of the case studies make a **super salary sacrifice or undeducted contributions**.

With a **salary sacrifice** you contribute some of your gross salary to super. This money is taxed at the special rate of 15%, instead of at your marginal rate, if your adjusted taxable income (including super contributions) is less than \$81,493. Higher income earners have to pay the superannuation surcharge: your super tax rate gradually increases — up to 30% for those on incomes above \$98,955 (including super contributions).

For example, if you earn \$65,000, your marginal tax rate is 47% (not including the Medicare levy). So from every \$1000 of salary sacrifice (taxed at 15%), \$850 is invested. If you just took it as normal pay you'd only get \$530.

If your employer doesn't allow you to make a salary sacrifice you can still contribute extra to your super fund from your after-tax income. This is called an **undeducted contribution**. There might still be a tax advantage as the investment earnings are taxed at a maximum of 15%.

You can also qualify for a (limited) tax rebate on your super contributions if you earn less than

Continued on page 22

WHAT'S YOUR SUPER DOING?

Your employer may allow you to use different types of super fund, or you might be able to decide between different investment strategies within your fund.

Don't invest too conservatively if you've a good few years to go before retirement.

Realistically you may need to put some of your money in riskier investments like shares to get a return that beats rises in the cost of living.

How much do I need to save?

These tables will give you an idea of how much you'll need to save for a comfortable retirement, depending on how much you earn now and how long till you retire. It's expressed as a percentage of your current gross annual salary.

Your accumulated super and any other savings are assumed to be zero, and the savings needed are on top of compulsory super contributions, so the percentages will only be a rough worst-case guide to your particular situation. You'll still need to see a financial adviser to make your retirement plan, but the tables at least give an indication of how urgent it is!

Percentage of gross income to be saved for 40% of pre-retirement income

Current income	\$35,000	\$50,000	\$75,000
Years to retirement			
5	38	77	107
10	13	61	45
15	4	26	24
20	*	13	14
25	*	3	8
30	*	*	4
35	*	*	1
40	*	*	*

* If the column has an asterisk, it means ASFA thinks your normal super contributions and the age pension will be enough to achieve this.

Assumptions:

■ The retirement income aimed for is based on the income in your last year at work. For example, if your current income is \$50,000, you want 80% replacement income and still have another 20 years to go until retirement, the replacement income won't be \$40,000 but quite a bit higher than that, as inflation and salary growth are taken into account.

Percentage of gross income to be saved for 60% of pre-retirement income

Current income	\$35,000	\$50,000	\$75,000
Years to retirement			
5	126	165	196
10	53	71	85
15	29	40	49
20	17	25	31
25	10	16	20
30	6	10	13
35	3	6	9
40	*	3	5

Percentage of gross income to be saved for 80% of pre-retirement income

Current income	\$35,000	\$50,000	\$75,000
Years to retirement			
5	215	254	284
10	94	112	126
15	54	65	74
20	35	42	48
25	23	29	33
30	15	20	23
35	10	14	16
40	6	9	11

Source: ASFA

- Super contributions are at 9% (they'll go up to this in July 2002).
- There's no unforeseen change to the current age pension.
- Investment earnings rate is 7% after fees and tax.
- Income in retirement goes up with inflation.



VANESSA MARSHALL

THANKS FOR YOUR HELP

We asked the Financial Planning Association of Australia and the Securities Institute in Sydney to recommend independent financial planners to help us with this study.

Many thanks to the financial planners — Sandra Bowley, Marisa Broome, Damian Cullen and Gary Mitchell — for their help.

Coast-hopping yacht more than a dream

Claire (46) and Francesco (39) Lyon* have a joint salary of \$120,000. Their home is worth \$450,000 and they still owe \$160,000 on it.

They have \$10,000 in a bank account, \$9500 in some shares and together about \$30,000 in super. They're able to save about \$7000 a year on top of \$14,000 worth of additional home loan payments they already make.

They were thinking about redrawing some money from their mortgage to buy an investment property in the country to use as a retirement retreat later on. They'd also like to buy a small coast-hopping yacht.

They've calculated that they'll need \$40,000 a year in today's money to fund their lifestyle in retirement. They're

planning to retire from full-time work in about 10 years' time. Although they're happy still to work part-time after that, they want to be in a position where they can choose any work they do.

Francesco works on contract, and not all his employers contribute to his super.

One adviser recommended that they maximise super contributions up to 10% of their gross salary (including their employers' contributions) while they're both in full-time employment (see *Paying extra super*, page 21). By doing this, at 60 Claire would have about \$195,000, while Francesco could have about \$555,000 at the same age.

The adviser also suggested that the \$10,000 from the bank account could be used as a lump sum payment into their mortgage. They could use the redraw facility on their mortgage in case of an emergency.

Both planners suggested that Claire and Francesco are in a position to accept the risks of borrowing to invest (see page 18). One planner calculated the different outcomes if they borrowed \$200,000 secured against their house and invested this in their country home or in managed funds. Projecting the investment over 15 years, the adviser found the managed funds option would give them an investment worth around \$456,000, while the country home would have a value of around \$274,000. They could use some of the earnings from the managed funds to buy a boat in only a few years' time. While it sounds good, this plan will only work if the planner's calculations match reality. If the sharemarket nosedives, they may even have put their house at risk.

* Not their real names.

Continued from page 21.

\$31,000, or by making a contribution for your partner if they earn less than \$13,800.

But remember, once you've put money into super it'll be 'preserved', meaning it stays there until you retire and are entitled to receive super. Only undeducted contributions made before July 1, 1999, aren't subject to this.

Your accountant or financial adviser can help you decide whether extra super contributions are suitable for you. For more information you can also contact the Australian Taxation Office's super helpline on 13 10 20.

Getting your plan on track

There's no magic involved in planning for an early retirement. Get your own retirement plan on track by talking to an independent financial adviser.

For more information on how to find an adviser, read *Financial planners: who can you trust with your life savings?* in CHOICE, October 1998, or at www.choice.com.au (see page 3 for how to get free trial access to our website). If you already have access, just type 'life savings' in the search box on the home page. □

Superannuation: the basics

If you're employed you've been entitled to receive compulsory employer contributions to your super since at least July 1992.

Today your employer has to pay 8% of your salary (with some exemptions, such as overtime) into your super fund. This will go up to 9% in July 2002.

There are two different types of super fund:

- **Accumulation funds** are the only type available to most people. Your retirement benefit depends on how much you put in, the period you've invested it for and how well the fund's investments have performed.
- With a **defined-benefit fund** your retirement benefit is predetermined, usually depending on your wage and years of service.

TIP: CHECK YOUR ADVISER

Always make sure your adviser:

- Holds a licence or has an authority to represent a licence holder.
- Gives you an advisory services guide (that tells you, for example, what fees you'll pay).
- Has at least three to five years' experience.
- Has professional indemnity insurance.

Investing in property

For several years Brett and Jeanette Turner* have been actively planning to retire in 2006 when Brett will be 55 and Jeanette 47. At that time they expect all their three children will have left home.

They have a combined annual income of about \$83,000 gross and paid off their house about 10 years ago. They've also managed to buy three investment properties.

As they're still paying off these investments they can't retire when Brett is 50. They've calculated they need about \$27,000 per year in today's money to live comfortably in retirement.

They have about \$7000 in a term deposit, which the adviser recommended moving into a managed fund.

Brett and Jeanette together have \$38,000 in super, with Brett making a salary sacrifice of \$450 a month. While Jeanette's super fund doesn't let her decide how to invest her funds, Brett's does, so one adviser suggested he move his super into share funds. While this investment would be more volatile and expose him to a higher risk, the adviser expected it to give him a greater return than the balanced fund he was currently in. The adviser also suggested adding \$2400 a year to the money invested in managed funds.



BRONCA THURM

When Brett and Jeanette retire they can sell the most expensive of their investment properties. With all their funds combined (excluding Jeanette's super, which she can't draw until she's 55) the adviser projected a lump sum of around \$340,000.

With the income from the two investment properties added to this, their annual income would be around \$35,000 (nearly \$30,000 in today's dollars).

* Not their real names.

USEFUL CONTACTS

- The National Information Centre on Retirement Investments (NICRI) provides free information about financial planning and specific investment products. Contact NICRI by calling 1800 020 110 or (02) 6281 5744 (www.nicri.org.au).
- Centrelink provides the free Financial Information Service (FIS). To contact a FIS officer call Centrelink on 13 23 00 (www.centrelink.gov.au).
- The Financial Planning Association of Australia (phone 1800 626 393, website: www.fpa.asn.au) can give you a list of financial planners in your area. It also has some free brochures, notably *Don't kiss your money goodbye*.
- The Australian Securities and Investments Commission can help you check a planner's licence and credentials. Contact it on 1300 300 630 (www.asic.gov.au).

Today's retirees are doing it tough

According to the Australian Bureau of Statistics, the average weekly gross income for Australians aged 65 and over was \$242 for singles and \$481 for couples in 1996-97. More than half of the couples lived on less than \$375 a week.

This compares with average weekly gross incomes for all Australians of \$391 for singles and \$890 for couples in the same year.

Older Australians spend much less than all other age groups on life's necessities like food and 'wellbeing' expenses (recreation and personal care).

The age pension

For nearly three out of four older Australians, government benefits are the main source of income.

According to law, the single pension rate has to be at least 25% of the male average weekly earnings. Pension rates are indexed twice a year in line with changes to the Consumer Price Index (CPI).

At the time of writing, the maximum rate was \$197.05 per week single or \$164.45 each for a couple (not including the pharmaceutical allowance).

To be eligible for the age pension you must be a resident of Australia, have lived here for 10 years (though there are exceptions to this) and must undergo an assets and income

test. If you exceed the assets or income thresholds you may still be eligible for a partial age pension. If you're blind you're exempt from these tests.

If you receive the age pension you may also be entitled to a range of supplementary payments, such as the pharmaceutical allowance or rent assistance. You may also qualify for a Pensioner Concession Card. If you don't receive the age pension you may still qualify for a Commonwealth Seniors Health Card.

For detailed information about your pension entitlements contact Centrelink on 13 23 00.

Want more info?

For more information about retirement, look at the following articles in www.choice.com.au:

- Retirement planner and retirement planner checklist: explains the key dates to keep in mind when planning your exit from the full-time workforce.
- Credit options for older consumers: only limited borrowing options exist for 'asset-rich' but 'cash-poor' retirees.
- Buying a small business: shows you what traps to avoid if you're planning to buy a small business in retirement.

And for more information about share investing, look up: *Share investing: how to do it right*.

Nothing tough about hands-free

Bend 'em, twist 'em, any way you move 'em — they break.

PHOTOS: RHONDA THWATE

IN BRIEF

■ If you're concerned about potential health problems from using a mobile phone, a hands-free device is touted as a good precaution, but they tend to break easily. Still, our tests show some designs are more robust than others. Here's what to look for.

A NUMBER OF PEOPLE HAVE complained to us that their mobile phonehands-free accessory broke in a relatively short time. If you're concerned about possible harmful effects of radiation from mobile phones, we'd suggest using a hands-free device (see CHOICE, August 2000), so we've put them to the test.

A big market

There are a lot of mobile phone brands on the market and most of them need a specific hands-free device — mainly because they have different types of connections. We looked at four phones from top-selling brands and bought both the hands-free device that comes with the phone and one from another brand designed to fit it (see *What was in the test*, far right).

The wiggles

When carrying a phone with a hands-free kit attached, it's almost impossible to avoid putting some stress on the cord and the connection that attaches it to the phone. In fact, if you wrap the cord around the phone when putting it away or use it to pick up the phone, the tension on it can

be quite high. Even if you're just walking with the phone on your belt or in your hand, the cord will be constantly twisted, mainly at the point where it attaches to the phone. So we devised a 'wiggle' test to see how long the connectors would take to break.

None of them lasted very long. The best of them managed around 16,000 wiggles before the microphone stopped working — but this isn't that many in the daily life of a mobile phone. The worst was a pretty pathetic 3500 before the plastic catches attaching it to the phone broke.

Hanging on

The accessories are attached to the phone in a couple of different ways, but none is very robust in terms of keeping you connected.

The NOKIA and PHILIPS devices use hooks that secure the connector to the phone; the ERICSSON has a small plastic lug that has to be pushed into a hole in the base of the phone. MOTOROLA has opted for a more traditional connection, similar to a normal audio plug, which also plugs into a hole in the phone (see the photo, right).

We pulled the cords at different angles to see how easy it would be to disconnect the hands-free device. Unfortunately, one of them had already

broken in the wiggle test, so we figured it had already failed this test.

The **ERICSSON** plastic lug seemed to work. It didn't break and held on quite well when pulled from the side or straight out from the handset. It was less secure if pulled from the front or back of the phone, probably because this is how it's designed to be detached. However, if sufficient force was applied to it at the wrong angle, it could be damaged.

The **MOTOROLA** was easy to remove when pulled directly away from the phone, but didn't break or come out at all when pulled from the other directions. This connection is on the top of the phone, which may be a good idea.

Both the **NOKIA** and **PHILIPS** hook systems broke easily.

Sound quality

Before we subjected each device to our wiggle and pull tests, we made some calls to see whether there was any difference in sound quality or ease of use.

We couldn't hear any difference in the sound quality between the cheaper and more expensive brands. However, there's more distance between the earpiece and microphone on some, so it's easier to compensate for noisy conditions or bad lines by bringing the microphone closer to your mouth. Also, clipping it onto your clothing stops the microphone and cord swinging away from your mouth while you walk — only the **MOTOROLA** device didn't have this feature.

Unfortunately, we found that the length of the cord between the earpiece and the microphone isn't consistent for the same model of hands-free kit, let alone within brands, for the same phone. This suggests there's a lack of quality control in the manufacturing process for these products.

What to do

- If you're about to buy a phone, first check what sort of connection it has and avoid hooks (see the photo of the **NOKIA** and **PHILIPS** hook connection for what to look out for).
- If you already have a phone, you can reduce the tension on the cord by not wrapping it around the phone, and detaching it carefully when it's not in use.
- Keep your receipt or other proof of purchase. Almost all the hands-free devices we looked at came with a 12-month warranty. If yours breaks in normal use, take it back to the retailer and get a replacement.



Clockwise from above are the Motorola, Philips, Nokia (with broken hooks) and Ericsson connectors. The Motorola and Ericsson designs seemed more robust.

Manufacturers' responsibilities

We think manufacturers can improve the design of these products by doing the following:

- Standardising a plug type that's cheap to produce — such as a normal audio plug — with a right-angle design to minimise stress on the cord.
- Avoid hooks and other connectors that can break easily.
- Improve the quality of the wire connection by increasing the amount and quality of copper in the device.
- Introduce stricter quality-control checks in the manufacturing process to ensure cord lengths are consistent. □

What was in the test?

We tested one device of the same brand as the phone and one hands-free device of another brand (called an 'aftermarket' kit) for each of the four phones. In addition, we already had one from an earlier test for the **ERICSSON**, so we tested it as well as the newer model. The **MOTOROLA** phone came with a **FORCE** brand hands-free device, so we bought a **MOTOROLA** one separately and have included them both in the brand-name column.

Phone	Brand-name hands-free	Aftermarket hands-free
Ericsson A1018s	RLF 501 06/02 HPB-09	Tandy 171-9151
Nokia 5110	HDC-9P	Optus World F-9610
Motorola v3268	77308 Force F-2VVV	Cellnet X1C016
Philips Savvy	HSSR 12/P	Cellnet X1P123

What's WAP?

It won't replace your computer yet.

IN BRIEF

■ It's a nice idea: getting all sorts of information displayed on your mobile phone, just like when you go to the Web on your computer. But while WAP technology can do this, currently it's time-consuming and expensive.

IF YOU'VE BEEN LOOKING AT THE mobile phone market lately, you'd be forgiven for thinking WAP is the only option. In fact, wireless application protocol (WAP) is not as sexy as you'd think from its widespread promotion.

WAP's an **open global specification** — set of rules — designed to allow you to use your mobile phone to download and display text and pictures.

■ **Open** because anyone with the expertise and resources can use it to create content that will appear on a mobile phone that's "WAP enabled". It's not restricted to specific groups.

■ **Global** because it's been developed, in part, by some of the largest mobile phone manufacturers in the world, who've set up a group called the W@P Forum to promote WAP products.



Potentially, it's not restricted to displaying data and some simple purchasing — there's also the prospect of retailers being able to send information on specific products and services to your phone as you pass their shop. A sort of ringing junk mail.

On a more useful level

there's also the potential to be able to control appliances in your home using your phone as a control panel. Helpful if you forgot to turn on the burglar alarm, but you'd have to have an alarm capable of connecting to the Internet. (If you want to know more about this sort of thing, *Computer CHOICE*, Jan/Feb 2001, has an article on the remote-controlled home. See page 49 for how to subscribe.)

NEED A PHONE?

If you need a new mobile phone or want a WAP-enabled model, go to www.choice.com.au and type 'mobile phones' in the search box.

What does it do?

WAP's function is similar to the Web's (see ABC, below) in that it allows you to use your mobile phone to display information on topics such as weather reports and TV guides, or to buy goods, book tickets and send and receive email. This information can also appear on the Web, or be designed specifically for WAP phones.

How does it work?

To connect to the world of WAP you simply dial the number of your WAP service provider to connect you to a special Internet device called a WAP gateway. This is a computer that does most of the processing and conversion of the information.

Most mobile phones have enough processing power to manage a list of phone numbers and connecting and holding onto a voice line. Adding WAP functions — such as displaying images — requires more processing power, which adds to the cost and size of the phone.

A computer screen is usually in colour and much bigger than a phone display. Also a computer display is connected to the computer's processing power, which means moving images and small programs can be added to web pages to provide functionality or interest. Although WAP phones tend to have slightly larger displays than normal mobile phones, they're nowhere near the size of a computer monitor. To get a reasonable representation of the data onto the phone, the

ABC

GSM: Global system for mobile communications — one of the main systems used around the world for digital mobile phones. It uses channels, split into eight slots. Each slot is allotted to a single phone and can carry data at 9.6 kilobits per second.

GRPS: General packet radio system allows a phone access to up to five slots in the GSM system. Theoretically this can increase data transfer speeds to around 170 kilobits per second. (There is some concern that accessing more than two slots may increase SAR (see below) above Australian regulations.)

HTML: Hypertext mark-up language — the computer language used to make Web pages.

SAR: Specific absorption rate — the rate of absorption of radio-frequency energy per unit mass of biological tissue. Currently this measure is used to regulate the electromagnetic radiation output of mobile phones in Australia (see *Tools not toys*, *CHOICE*, August 2000, for more on this).

Web (World Wide Web): An enormous collection of information stored as text, sound and graphics in around seven million websites all over the world.

WML: Wireless mark-up language — similar to HTML, except it includes instructions on how to display a website on a portable device.

W@P Forum devised a way to take web information and cut it down to fit on a small screen (see WML in ABC). Naturally some formatting and functionality are lost, and currently there are no pictures.

WML documents are divided into chunks of information in the form of 'cards' displayed on the screen, which can be scrolled through using the up and down buttons on your phone. This also helps to reduce the amount of data travelling over the wireless network.

Slow data

WAP's biggest drawback at present is the time it takes to download even simple text-based messages. The current speeds are equivalent to what was commonly experienced for internet use in the early 1990s — around 9600 bits per second (Bps). Now it's common to connect to the Internet at 56 kbps — an increase in download speed of around 600%.

This lack of speed isn't just a tedious inconvenience, it's also a very real cost. Charges for WAP services vary between suppliers — at the time of writing, Telstra charged 22 cents for connection and 16.5 cents every 30 seconds when connected; Optus and Vodafone had no connection fee but charged 22 cents for every 30 seconds; and One.Tel charged 25 cents for the same period. So receiving 100 kbps of information using your WAP phone would take around 1 minute 23 seconds to download, and in peak hours cost you around 70 cents with Telstra, 66 cents with Optus and

Vodafone and 75 cents with One.Tel.

And 100 kbps is only about half a page of unformatted text — most of which you won't see displayed on your phone's screen. A WAP phone has built-in software which reads instructions on how to display the information sent to it. These instructions are included in the data transferred to your phone, even though you don't see them.

Until data transfer times improve, this cost will be one of the main reasons why WAP will be slow to take off.

Fiddly phones

Apart from the relatively small and mainly monochrome screens on WAP phones, they also have a small and limited keypad. Some come with extra keys for scrolling, but entering information can be a tedious and time-consuming business.

What's WAP's future?

The manufacturers of WAP technology are very positive in their predictions. They claim data transfer rates will increase substantially with the new general packet radio system (GPRS). Theoretically a GPRS phone can access data at about the same rate as or faster than a normal computer. It can also be permanently connected, so you don't have to dial in to retrieve your email.

Unfortunately, this prediction may prove to be somewhat overstated. To download data to the phone at these higher speeds, the phone may exceed

current Australian SAR regulations (see ABC) for energy transmission, or even overheat and burn out. Sending data from the phone is less likely to be a problem.

Another limiting factor will be battery power. A GPRS phone that's permanently connected is going to use more power than a normal GSM mobile phone (see ABC) that's used intermittently. Battery life is already a problem for some mobile phones, and it can only get worse for GPRS phones if there isn't a major improvement in power management technology.

Assuming these problems can be overcome, in the not too distant future you can expect to be able to use a mobile phone to download and listen to music (great speakers!), watch TV or take and send digital pictures. Of course, which of these novel applications will be useful enough in practice to survive, only time will tell.

Optus and Vodafone have launched a location-based WAP service that knows where you are and allows you to look for information on services and businesses that are either within your area, or lie along the route you're travelling. We'll be surprised if other carriers don't launch similar services soon.

Another recent innovation is the incorporation of WAP technology into electronic personal organisers. With the advantage of larger and clearer screens and more processing power than phones, these devices might be the way we communicate in the future. □

How it works

Mobile phone



Encoded requests over a mobile phone network

Encoded response over a mobile phone network

Wap gateway

DECODER

ENCODER

Requests over the Internet

Response (information) over the Internet

Website



NEW

All About Bread

David Oakenfull

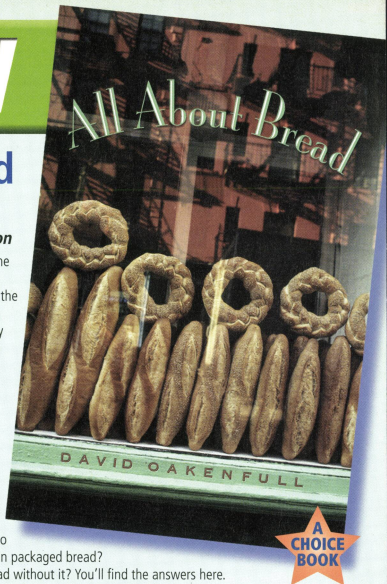
With a foreword by Rosemary Stanton

For millions of people around the world bread is the most basic of foods. First came the discovery that grasses growing wild in western Asia, Europe and the Middle East — wheat, rye and barley — could be domesticated. Some genius in Egypt devised a way of grinding the seeds for flour, then another found that leavening produced a lighter, high-rise bread.

This fascinating book outlines the history of bread and the various grains used to make it, and the use of bread in religion, myth and folklore. It explains modern manufacturing methods and the differences between the various types of packaged bread, and discusses some of the nutrition claims made for special breads.

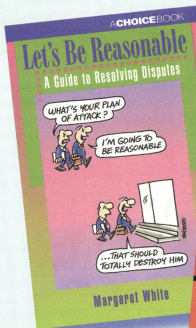
Why does bread go stale and mouldy? Why does bread from hot bread shops taste different? What does yeast actually do? Why is it necessary to 'punch down' the dough? What are the additives in packaged bread? What does gluten do and can you make good bread without it? You'll find the answers here.

There are also chapters on how to make your own delicious fresh bread by hand or using a bread-making machine, including some basic recipes and step-by-step photographs, and tips on storing bread.

\$25.00 Hardback Code: BRD

Let's Be Reasonable

Having a disagreement with your teenager about their rights (yes, they do have some), or with your neighbour about a new fence? This book presents tactics and strategies that anyone can use to try and solve all sorts of disputes without courts and lawyers.

\$16.50 Code: LBR

5 Years to Financial Freedom

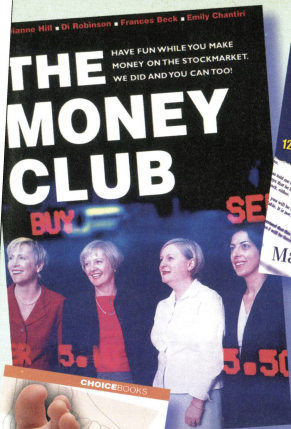
Liberate yourself from money worries — for life

MORRIS KAPLAN

5 Years to Financial Freedom

After many years in the financial industry, the author has developed a program for personal money management. This book will help those who follow the plan to eliminate their debt and develop a savings and investment plan to create their own financial freedom in five years.

\$19.95 Code: SYFF



The Money Club

Dianne Hill, Di Robinson, Frances Beck, Emily Chantiri

This book is about how one investment club started and has run successfully — in terms of both profit and friendships. It covers the set-up, the decisions that have to be made (like which companies *not* to invest in) and how to calculate the payouts. A practical and fascinating insight into setting up and running a money club.

\$16.95 Code: TMC



Caring for your feet

In simple language and with lots of diagrams and pictures, this book explains how feet work and provides foot health information for everyone from children to grandparents. It will help the reader to identify and perhaps avoid common problems — from tinea, bunions and sore heels to shin splints, blisters and knee pain. And there's extra help for people with arthritis or diabetes.

\$18.00 Code: FEET



Put It In Writing

120 well-considered, cool and authoritative letters, written by a lawyer, that you can adapt to suit your problem. The letters are backed up with practical advice about your rights in the situations involved, a list of useful contacts and a glossary of terms.

\$18.00 Code: PIW2



Taylor and Beyond

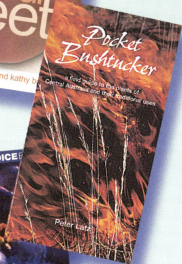
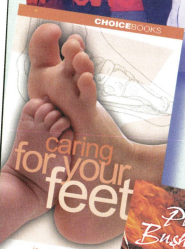
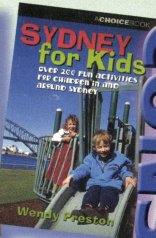
Written by respected cricket writer, Malcom Knox, this fascinating read is the definitive account of the successes and controversies of Australian and international cricket in recent times. An ideal gift for the cricket enthusiast.

\$27.95 Code: TAYL

Sydney for Kids

A special guide to venues and activities in Sydney that are suitable and enjoyable for children. Each entry includes information about getting to the venue, amenities and prices.

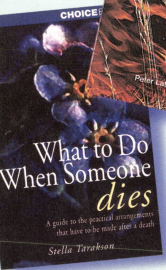
\$16.50 Code: SFK



Pocket Bushtucker

This is a pocket-sized guide to more than 180 central Australian 'bushtucker' plants. Each listing includes common, Aboriginal and scientific names, a description, habitat and uses. It includes colour and black-and-white illustrations.

\$22.95 Code: PKBT



What to Do When Someone Dies

Although we never like to talk about the topic, we all eventually have to deal with the death of friends or relatives. This book provides practical advice, answering many of the questions you may ask when that time comes.

\$20.00 Code: WTDD



WARM HOUSE COOL HOUSE

Sustainable House

Sustainable House

Sustainable House explains how one family made their home almost completely self-sufficient in water, electricity and waste disposal. It has practical advice and useful contacts for home owners, builders, architects and councils, with colour and black-and-white photographs.

\$35.00 Code: SUSH

Warm House Cool House

Warm House Cool House explains how low-energy buildings work, giving examples of over 110 inspirational Australian homes designed to provide a comfortable living environment for our various climates and save on power bills. Extensively illustrated with plans and photographs.

\$33.00 Code: WHCH

Before and After Retirement

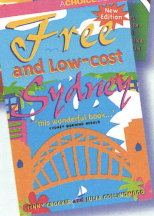
The revised and updated edition of this popular guide to retirement and retirement planning for Australia now includes information about lifetime health insurance, GST and the latest government benefits and bonuses. It also has worksheets and checklists to help you plan more effectively.

\$27.50 Code: BAR2

Ethical Investment

The second edition of this popular book provides a bounty of information to help you invest your money wisely and ethically. Some of the issues it presents include looking at a company's ethics, details and ratings of ethical investments, and examples of how to invest in your own home (tax-free), and indirectly in the environment, by making your home energy-efficient.

\$17.00 Code: ETI2



Free and Low-cost . . .

Going away these school holidays? Why not make the most of your time and money with CHOICE Books' *Free and Low-cost Sydney*, *Free and Low-cost Melbourne* and *Free and Low-cost Brisbane and the Coasts*.

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CB/0104

Steam mops: *any good?*

Given their price, the answer's 'no' for most people.

A STEAM MOP HAS A WATER container with a heater and produces steam from its cleaning head, which is covered with a cloth pad. While you move it slowly over the floor, the steam loosens the grime and the pad picks it up. That's the theory, anyway.

They're claimed to be suitable for sealed hard surfaces such as varnished timber, ceramic, marble or lino floors, but shouldn't be used on cork or cork tiles, unsealed timber and waxed surfaces (the steam will remove the wax).

How well do they work?

In our tests, both steam mops cleaned lightly soiled, regularly cleaned surfaces very well and left them streak-free, and the cleaned floor dried quite quickly.

With repeated use they also removed low levels of old, stubborn dirt.

However, both did a pretty poor job on heavily soiled or greasy floors. When we tried

to clean muddy footprints and car grease off lino, they just smeared them across the floor. This seems to be because, unlike a traditional mop, you can't rinse a steam mop pad during use, so you just spread the dirt around. Kenwood told us theirs isn't designed for such "extreme conditions".

Nor are they designed for mopping up larger spills. And if you leave the head in one spot for more than 15 seconds, you risk damaging the floor. The cord can get in the way during use, and for storage you need about as much space as for an upright vacuum cleaner.

Worth the price?

So is it worth anyone's while to buy a steam mop? They're not cheap and not very effective on heavily soiled floors, so the answer's 'no' for most people. But if you're sensitive to detergents or house dust and wet-wash your floors very regularly, you could find one useful.

The KENWOOD in particular could take some effort out of your cleaning routine. It's much easier to use than the

The Kenwood Steam Mop Deluxe 2000 SC 2000 (RRP \$159, two-year warranty): It's pretty easy to push, fill and operate, and has indicator lights for 'power on' and 'tank needs refilling'. It takes about four minutes to heat up and steams for around 15 minutes. It works well on lightly soiled surfaces but not dirtier ones.

Overall score: 73%, so if you think you'd find a steam mop useful, this is the one to buy.

IN BRIEF

■ Steam mops won't replace traditional mops: they're not suitable for cleaning heavily soiled floors and mopping up spills, and only one of the models tested makes the job any easier.

RONSON, or squeezing out a traditional mop, and you don't need any detergent (both models work without). It has a long handle so you don't have to stoop or bend, and is relatively easy to push.

With both mops, steam can escape or hot water drip from the mop when you empty the tank after each use (as is advised) or remove the cleaning pad. So unplug the cord and leave the mop to cool down before putting it away. □

But for REAL dirt ...

... a basic string mop works best — and it's of course much cheaper than a steam mop. We compared the two steam mops with a string and a sponge mop. Both traditional mops beat the steam models by a wide margin for cleaning heavily soiled or greasy areas, and on a slightly soiled lino floor they worked nearly as well as the expensive steam models.

The Ronson Steam 'n' Clean 8219 (RRP \$110, one-year warranty): This mop is harder to use than the Kenwood — the head swivels and wanders off course, so it's hard to push, and it's difficult to fit and remove the filler cap. It has a burst of steam that's not very effective, one indicator light for 'power on', takes around two minutes to heat up and steams for about 20 minutes. It works well on lightly soiled surfaces but not dirtier ones. Overall score: 60%.



PHOTOS: BRUNO THAVATE

The best indoors for the great outdoors

Planning to go camping at Easter? Most of the family-sized dome tents we tested will keep you dry, and perhaps even quite cosy...

IN BRIEF

- The tested tents are claimed to be for four people, though you'd probably find they're more suitable for two for any extended stay.
- Generally speaking, of the two dome tent designs, geodesics are more spacious and stable in high winds, and crossovers are quicker and easier to put up.
- Only one tent failed for waterproofing: the **BLACK WOLF 5A Plus Dome**.
- Two other tents tested offered something a little different: one is very high-quality and heavy-duty (see page 37), and the other's claimed to take only 30 seconds to put up (see page 35). Are they worth the extra cost?
- See our assessment of solar showers on page 38.

TWO WEEKS OF RAIN, WIND, HAIL, mud, leeches, fog and cold ... it sounds like a recipe for the camping trip from hell. And so it was for our intrepid CHOICE technical staff, out in the wilds of Barrington Tops, NSW, testing tents. Visions of spending their time lounging around in the sun wearing shorts and t-shirts, fishing, hiking — generally having a pleasant, relaxing time in the name of work — were washed away in the wet.

OK, so our testers didn't fare too well — what about the tents? On the bright side (sort of), you couldn't ask for more ideal conditions for putting tents through their paces: if they can stand up to that, presumably they can stand up to most things nature cares to throw your way. And after a somewhat inauspicious start (see *Putting them up*, right) most of them fared well on the whole, especially considering the extreme weather conditions.

The tents

The test looked at 14 family-size (four-person) dome tents consisting of an inner tent made of lightweight fabric with mesh doors and (usually) windows, a sewn-in floor and a frame made of

flexible fibreglass poles, plus a waterproof fly (the outer tent). There's also a vestibule, which can be used for storing your luggage and cooking equipment, or even sleeping an extra person.

WHAT TO BUY

WILD COUNTRY Oxley	\$499
DMH AUSTRALIA Holiday Series Sturt BEST BUY	\$320
KOOKABURRA 5 Star Series Geodesic EV	\$499
NOMAD Bass 4 Person Extended Geodome	\$429
OZ TRAIL Highlander 4	\$399

We weighted the usability of the living area higher in the overall score than the ease of assembly because the time you spend in the tent once it's up is more important than the 15–20 minutes you spend putting it up. The tents that came out best overall are all geodesics (see *Dome design*, right) thanks largely to their higher usability scores.

However, if usable space isn't of prime importance (if there's only a couple of you using it mainly to sleep in, say) and you want a tent that's a little quicker to assemble, the best-rated crossover model is the **NOMAD Hume 4 Person Extended Dome**. At \$299, it's cheaper than any of the geodesics tested.

There are two basic styles of dome tent: the test included eight geodesic and seven crossover-style constructions (their differences are explained in *Dome design*, below). The testers judged how quick and easy they are to put up and take down, and how comfortable the tents are to live in and use.

Putting them up

It was bucketing down with rain when our testers arrived at the campsite, but with no break imminent they proceeded to put up all the tents. And here they made two important observations:

- You can't put these tents up when it's raining heavily because the fabric inner tent, which isn't waterproof, gets completely soaked before the fly (outer tent) goes on over it. As a result, the tents were unusable for the first week, because the floors had puddles of water and the fabric couldn't easily dry out in the humidity.
- The first time you assemble your new tent will probably take longer

than the second and subsequent times. The very first tent took our testers over an hour to assemble, but the second time it took 25 minutes.

The moral of this story is to have a go at putting it up before you leave for the campground: the less time it takes with an approaching cloudburst, the better.

The easiest tents to assemble were the crossover style because the frames consist of three or four rather than five or six pieces, and they have fewer pegs and ropes overall. But at around 15 versus 20 minutes, the difference isn't great.

Usability

The trade-off for the faster assembly of crossover models is less living space at head level. Their walls slope in more towards the centre (see the photos below), so there's less head/standing room and less usable space, despite their having the same floor size.

The crossovers ranged in height from 160–180 cm, but the slope of the walls often meant you could only stand in the very middle. After a few days of stooping and rolling around on the floor to get dressed, this might become an issue. With the exception of one model, the geodesic design allows a person of average height to stand up inside. The HURRICANE Geodesic has a height of only 155 cm, whereas the other geodesics range from 185–200 cm.

In fact the size of most of these tents would test the endurance and serenity of a four-person family after a few days — and a low ceiling certainly won't help. For extended stays, they're probably better suited to couples.

Another factor that may limit a tent's comfort and usability is ventilation. Particularly in a hot, humid climate, the more doors and windows the better. All the tents have front and rear doors, but the COUGAR and DMH Bathurst have the worst ventilation: they each have only one side door in the vestibule and neither has windows.

Continued on page 35

PITCHING YOUR TENT IN THE RAIN

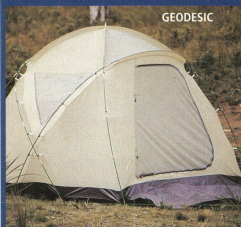
Our testers discovered the hard way that you can't pitch this sort of tent in the rain (see left), though this may not be a problem in most parts of Australia, as rain isn't usually so relentless.

In Europe and the UK, however, weather conditions can make things so difficult for campers that tents are often designed so they can be put up in the rain: the frame fits into the waterproof fly, which goes up first, and the inner tent goes up from underneath them. With some it's also possible to put the whole lot up together, providing you get it ready beforehand at home (or in a big, dry place like an undercover car park or a cave).

You can buy 'multi-pitch' tents like these in Australia, but the range is fairly limited. Alternatives include conventional cabin tents, which consist only of a single, waterproof layer.

Dome design

GEODESIC

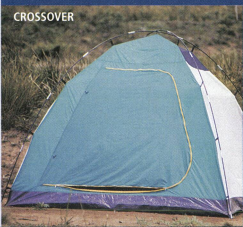


The main frame consists of two poles attached to diagonally opposite corners of the base of the inner tent. The inner tent is then clipped onto the frame, effectively hanging from it.

The geodesic tent (left) differs from the crossover (right) in that there are two extra poles — one on each side — that pull the sides of the tent out, giving you more usable floor and standing space.

The fly goes over the top of the frame and inner tent, and is pegged down. The fly also creates the roof of the vestibule, held up by one or two poles. Most models came with a vestibule floor, but it's not essential, and you could use a tarp instead.

CROSSOVER



PROFILES

The tents in the *What to buy* list are profiled in rank order; they're all of the geodesic design, with very good usability scores, a high ceiling in the tent (at least 1.95 m) and higher than average vestibule height (1.8 m). They're all stable and waterproof, but they're a little heavier than crossover tents, and take longer to put up.

The crossover-style **NOMAD Hume Extended Dome** is also profiled (see right) as the best model of that design. It's cheaper than the geodesics and easier to put up.

Prices given are recommended retail. However, it pays to shop around: we paid substantially less than the RRP for most tents.

WILD COUNTRY OXLEY

RRP: \$499.

GOOD POINTS

- Best usability score.
- Good ventilation — two very large windows, and a door on both sides of the vestibule (as well as the front).
- Both the flyscreen and the door to the inner tent can be opened with the one zip (see *What to look for*, page 36, for more on this feature).
- The assembly instructions are permanently attached to the carry bag.
- Five-year warranty.

BAD POINTS

- Equal slowest to assemble: the frame, which is a combination of metal and fibreglass poles, is a little more complicated than the others.
- It doesn't come with a vestibule floor, but you can get one as an optional extra for about \$28.
- It's the heaviest of the 15 tents.
- It has two carry bags (one for the tent and one for poles), which is less convenient than one; and the carry bag for the tent is a little too small.
- It takes a lot of pegs (48) to secure and the ropes are difficult to adjust.



DMH AUSTRALIA HOLIDAY SERIES STURT

RRP: \$320.

GOOD POINTS

- Good ventilation — three windows, and a door on both sides of the vestibule (as well as the front).
- Both the flyscreen and the door to the inner tent can be opened with the one zip.
- Has a floor in the vestibule.

**BEST
BUY**

- Has power cord access through the side of the tent.

BAD POINTS

- Assembly instructions aren't attached to the carry bag.
- Carry bag is a little too small.
- Ropes are a little thin.
- Second-heaviest tent.

KOOKABURRA 5 STAR SERIES GEODESIC 240x240 EV

RRP: \$499.

GOOD POINTS

- Good ventilation — two windows, and a door on both sides of the vestibule (as well as the front).
- Both the flyscreen and the door to the inner tent can be opened with the one zip.

- Has a floor in the vestibule.
- Has power cord access through the side of the tent.
- Assembly instructions are permanently attached to the carry bag.

BAD POINTS

- Carry bag is a little too small.



NOMAD BASS 4 PERSON EXTENDED GEODOME

RRP: \$429.

GOOD POINTS

- Reasonable ventilation — two windows, and one door in the vestibule.
- Good, strong peg-down points.
- Has a floor in the vestibule.
- Both the flyscreen and the door to the inner tent can be opened with the one zip.
- Five-year warranty.

BAD POINTS

- Carry bag is a little too small and assembly instructions aren't attached to it.
- Only has one side door in the vestibule (as well as the front).
- Has power cord access through the side of the tent but it's too small for a plug to fit through. The distributor says tents in recent shipments have large enough power cord access.

OZ TRAIL HIGHLANDER 4

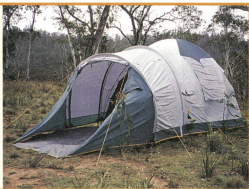
RRP: \$399.

GOOD POINTS

- Good ventilation (two windows); and two small air vents on the front of the vestibule, as well as doors on both sides of the vestibule (and the front).
- Has a floor in the vestibule.
- Has power cord access through the side of the tent.

BAD POINTS

- Assembly instructions aren't attached to the carry bag.
- Ropes are a little thin.
- The flyscreen and the door to the inner tent have to be opened separately.

Best crossover tent
NOMAD HUME 4 PERSON EXTENDED DOME

RRP: \$299.

GOOD POINTS

- Reasonable amount of usable space: the inner tent has a large floor area and good height.
- Reasonable ventilation — two windows, and one door in the vestibule.
- Quick and easy to erect.
- Has a floor in the vestibule.
- Good strong peg-down points.
- Both the flyscreen and the door to the inner tent can be opened with the one zip.

- Has power cord access through the side of the tent.
- Five-year warranty.

BAD POINTS

- The height in the vestibule area is a little low (1.7 m).
- Only has one side door in the vestibule (as well as the front).
- Assembly instructions aren't attached to the carry bag.
- Carry bag is a little too small.



Continued from page 33

Quality and weather resistance

There wasn't a lot of difference in the quality of materials used for the tents themselves, and there were no tears, breaks or other problems, despite the extreme weather conditions.

There were some differences in the quality of the all-important ropes and pegs: ropes broke on both BLACK WOLF models. Problem pegs were supplied with the DMH Bathurst and KOOKABURRA Voyager EV — they were small and thin, bending easily.

The strong winds and hail weren't a major problem for the tents. The geodesic tents were more stable than the crossovers, with the WILD COUNTRY Oxley being the most stable, thanks to its combination metal and fiberglass frame.

While most tents got some water in the vestibule, remarkably there was only one tent where rain leaked into the sleeping area: the BLACK WOLF 5A Plus, which leaked every time it rained. The water entered through the vestibule side door zip, which extends over the inner tent. Because of this design flaw, we recommend you don't buy this tent.

A tent in 30 seconds?

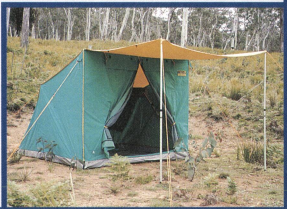
The OZTENT 30 Second Tent Ranger — so-called because that's supposedly how long it takes to put up — caught our eye. Does it really take only 30 seconds?

Well, kind of: it does take only 30 seconds to get a tent-like thing up, but it's more like a total of five minutes to take it out of its bag, erect it and peg it out. Even still, it's certainly much quicker and easier to erect than the other tents in this test. And it takes about the same time to pull down.

The speed comes courtesy of its inbuilt frame — the main poles are permanently attached to the inside of the tent. It's a cabin-style tent with a very different shape from the dome tents in our main test, and it has a reasonably usable living area (although you can only stand at the front).

Its main disadvantage is its size when folded up: at 2.1 m long, it won't fit in most cars or even some station wagons, and you'd probably have to take it in a trailer or on roof racks. It's also quite heavy (20 kg) and more expensive than most other tents we tested (we paid over \$800).

Verdict: A good-quality tent that's very quick to put up and take down, but awkward to transport and quite expensive.



DOME TENTS

Brand / model (in rank order)	Manufacturer / distributor	Origin	Price (\$)*	Warranty (years)	Type	Weight (kg)	Dimensions
							(L x W x H; m)
WILD COUNTRY Oxley	Kangaroo Tent City	China	499	5	Geodesic	19.6	2.30 x 2.30 x 1.9
DMH AUSTRALIA Holiday Series Sturt	DMH Imports	China	320	2	Geodesic	16.6	2.30 x 2.30 x 1.9
KOOKABURRA 5 Star Series Geodesic 240x240 EV	Kookaburra Gas & Leisure Products	China	499	1	Geodesic	15.2	2.30 x 2.30 x 1.9
NOMAD Bass 4 Person Extended Geodome	Barbeques Galore	China	429	5	Geodesic	15.8	2.75 x 2.30 x 1.9
OZ TRAIL Highlander 4	Oz Trail	China	399	1	Geodesic	15.9	2.30 x 2.30 x 2.0
NOMAD Hume 4 Person Extended Dome	Barbeques Galore	China	299	5	Crossover	13.4	2.75 x 2.30 x 1.9
BLACK WOLF Super 4 Dome	Phoenix Leisure Group	China	349	2	Geodesic	14.8	2.30 x 2.30 x 1.9
COUGAR Sundowner 4 Person Extended Dome	Barbeques Galore	China	229	1	Crossover	8.5	2.30 x 2.30 x 1.9
DMH Australia Holiday Series Bathurst	DMH Imports	China	199	2	Crossover	9.4	2.30 x 2.30 x 1.9
OZ TRAIL Seascape 4EV	Oz Trail	China	249	1	Crossover	11.3	2.30 x 2.30 x 1.9
KOOKABURRA Premier Series II Voyager EV	Kookaburra Gas & Leisure Products	China	259	1	Crossover	10.2	2.30 x 2.30 x 1.9
HURRICANE Geodesic Extended Vestibule LH 4GVX	COI Leisure	Malaysia	350	1	Geodesic	13.3	2.30 x 2.30 x 1.9
HURRICANE Extended Vestibule LH 4VX	COI Leisure	Malaysia	250	1	Crossover	8.8	2.30 x 2.30 x 1.9
BLACK WOLF 5A Plus Dome	Phoenix Leisure Group	China	220	2	Crossover	9.4	2.30 x 2.30 x 1.9

* The prices given are recommended retail. It's worth shopping around, as we found prices under the recommended retail.

(A) Not square, corners cut off at rear.

WHAT TO LOOK FOR

- If you're after a **family-size tent**, your two main choices are a cabin-style or a dome model. These days dome tents are more popular because they're lighter and easier to put up and take down. Cabin-style tents were better suited to the days when the family camped in one spot for three to four weeks. Today's family camping is typically shorter-term and more mobile (a few days here, a few days there...).
- If a **dome tent** is what you want, your choice is either a crossover or geodesic style. Geodesics generally have more usable space and greater stability, but are heavier and a little slower to put up (and are more expensive).
- If you're going to spend a fair bit of time in the tent, make sure it's **high enough to stand in**. Also make sure the walls don't slope in too much, limiting your usable space. Ideally, see it erected in the shop to be sure.
- Look for a model with **assembly instructions permanently attached** to the carry bag: this can be very useful if you haven't put the tent up in a long time.
- A **vestibule floor** is handy, and those that peg down are easier to secure than those that clip on or attach by Velcro because you don't have to line the tent up so precisely.
- A large, strong **carry bag** is essential, but note that what appears to be an adequate size in the shop may be too small when you try to fit the tent back in it: it never rolls up as small as when you first got it.
- **Pegs** should be a good length (at least 20 cm) and thickness (around 5 mm) and preferably made of steel: plastic ones, with their flatter profile, are good in very sandy soil, but break more easily.
- **Ropes** should also be a good length, thickness (a minimum of 3.5 mm to 4 mm diameter) and easy to adjust.

- **Peg-down points** should be heavy-duty and securely attached to the tent.
- Windows are essential for good **ventilation**, and should be large and easily secured when rolled up. Zipped windows are best, but there should be good wide flaps over the zip to keep water from entering the tent.
- A **door** on either side of the vestibule, as well as the front, is convenient, as it allows you to keep the weather out if it's coming from one direction, but still have ventilation.
- Vestibule **doors that roll upwards** rather than sideways are handy, because they can be pegged out as awnings.
- **Internal pockets** in the inner tent are useful for storing small items.
- **Power cord access** through a small zip in the inner tent wall is useful if you'll be using power (for a light, say).

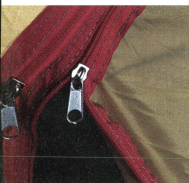
Doors should be large, with adequate height at the entrance, and have a flyscreen. Some tents allow you to zip the screen and the door together, so it becomes a single flap. You can then use just the one zip to open and close the flap, and it's a lot more convenient than zipping the door and screen separately. But if you want the door open and the screen closed — to let the breeze in and keep the insects out — you can unzip the door and screen so they're separate again, and then simply zip the screen closed.



	1	2	3	
Vestibule floor	Usability score (%)	Ease of assembly score (%)	Overall score (%)	Brand / model (in rank order)
2.55 x 1.80	95	60	85	WILD COUNTRY Oxley
2.50 x 1.80 ✓	90	65	83	DMH AUSTRALIA Holiday Series Sturt
2.50 x 1.80 ✓	90	65	83	KOOKABURRA 5 Star Series Geodesic 240x240 EV
2.50 x 1.80 ✓	90	65	83	NOMAD Bass 4 Person Extended Geodome
2.40 x 1.80 ✓	90	65	83	OZ TRAIL Highlander 4
2.50 x 1.70 ✓	70	80	73	NOMAD Hume 4 Person Extended Dome
2.55 x 1.70 ✓	80	50	71	BLACK WOLF Super 4 Dome
2.50 x 1.70	60	80	66	COUGAR Sundowner 4 Person Extended Dome
2.55 x 1.55 ✓	60	80	66	DMH Australia Holiday Series Bathurst
2.50 x 1.55 ✓	60	80	66	OZ TRAIL Seascape 4EV
2.50 x 1.50 ✓	50	80	59	KOOKABURRA Premier Series II Voyager EV
2.50 x 1.45 ✓	50	65	55	HURRICANE Geodesic Extended Vestibule LH 4GVX
2.45 x 1.45	40	80	52	HURRICANE Extended Vestibule LH 4VX
2.40 x 1.50 ✓	50	80	59	BLACK WOLF 5A Plus Dome



Door zips should have large flaps over them to keep water out. Look for tents where the vestibule door zip doesn't extend over the inner tent (unlike the Black Wolf 5A Plus Dome, pictured above), because if it does leak, you don't want it leaking into the sleeping section.



High quality, high price

A very well-made, heavy-duty and expensive tent caught our eye, and we wanted to see how it compared with the lighter, cheaper models in our main test.

The **SERENGETI Safari Bella Vista** is a crossover dome tent constructed from heavy-duty canvas with flexible sprung-steel poles. With a floor area of 2.5 x 2.5 metres and sloping sides, the usable living area of the tent is similar to other crossover models we tested. However, it doesn't have a vestibule, just a small awning with no sides.

It's quick to put up and pull down (each took 10 minutes) but it's fairly bulky when packed away and has two separate bags for the tent and the poles. It's also very heavy, at just on 30 kg for tent and poles.

Verdict: At a cost of \$995, you don't get a lot of tent for the money, but this tent should last a very long time and withstand most weather conditions you're likely to encounter.



1 Usability score

Tents were rated on how comfortable they are to live in and use, with the score taking into account a number of factors, including:

- The usable area of the inner tent and vestibule (height and floor area).
- Access to the tent.
- Number and size of doors and windows.
- Ventilation.

2 Ease of assembly

This score reflects how long it took to put the tents up and take them down. Times ranged from 15–25 minutes to put up and 10–20 minutes to take down. These times are only a guide because they're based on the times of experienced users. Times will vary depending on experience, weather and ground conditions.

3 Overall score

The overall score is made up as follows:

- Usability: 70%.
- Ease of assembly: 30%.

Solar showers

Braving the wilds out back of Woop Woop doesn't mean you have to forgo the comfort of a hot shower when you're camping.

Models on test

- COI LEISURE Super Solar Shower
- COLEMAN 5-Gallon Camp Shower
- LI-LO Ultimate Solar Shower
- OUTBACK Camp Shower

What are solar showers?

Solar camping showers are basically a thick plastic bag — one clear side and one black side — with a hose and shower nozzle and on/off tap. You just fill the bag with water and lay it in the sun clear side up. Solar radiation penetrates the clear plastic and water, heating up the black surface, which in turn heats the water. When the water's hot enough, you hang the bag from a tree and shower under it. You could also use the water for washing dishes or clothes.

How well do they work?

The four solar showers tested are all capable of giving you about five minutes of hot (approximately 40–45°C) water after two to three hours in the sun. It's probably not comparable to your usual shower at home, but adequate for a quick wash when you're camping. The times and temperatures depend on weather conditions, and you may find

As long as it's warm and you've got a few hours of sun, a good supply of water and a handy hanging tree, a solar shower could be that inexpensive little bit of camping luxury you need.

they're not as good if you camp in winter or cloudy weather.

The difference in performance between the four showers is minimal:

- The LI-LO is a little smaller than the others (15 L, compared with 17–18 L) so your shower might be slightly shorter.
- The OUTBACK isn't quite as easy to fill as the others: it has a smaller opening, which wouldn't be a problem if you're immersing it in a creek or dam, but is more difficult if you're using a bucket or tap.

There was a major problem, however, with the COLEMAN — the hose partly detached from the bag on both samples we bought, allowing water to leak out. So this model isn't recommended.

We also noted some problems with the instructions for a couple of models:

- The OUTBACK's instructions say to lay it in the sun black side up (rather than clear side up). Doing this made the water temperature several degrees lower in our test than for the other three models.
- When we tested it clear side up, the temperature was the same as the others.
- The box instructions for the COI LEISURE also say to lay it black side up, but the instructions on the bag itself are

correct — and probably the ones you'd follow once you've thrown the box away.

- The LI-LO has no instructions on the bag — only the box.

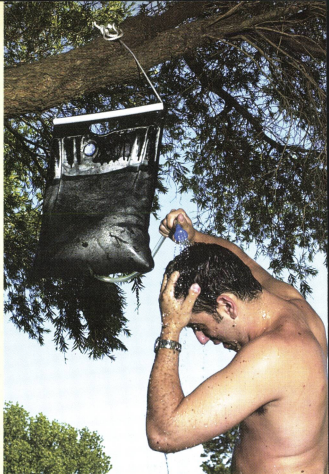
Getting into hot water

You need to take a bit of care using these products because the water can reach fairly high temperatures. All four models carry warnings about this, varying from "well over 40°C" to "in excess of 50°C". These temperatures could be especially dangerous for small children, and we recommend you test the water temperature before showering. If it's too hot, add some cold water or allow it to cool in the shade.

The COLEMAN and COI warnings were in Fahrenheit rather than Centigrade. Heat safety warnings on products sold in Australia should be in Centigrade. □

WHAT TO BUY

COI LEISURE Super Solar Shower	\$15.90
LI-LO Ultimate Solar Shower	\$19.95
OUTBACK Camp Shower	\$17.45



Lay the bag clear side up in the sun; black side up gives cooler water.

Flat-screen

(sort of)

TVs

Does a true flat screen really give you a better, more detailed picture?

FLAT-SCREEN TELEVISIONS ARE ALL the rage because they're better, right? Not necessarily — on test, models with a true flat screen didn't necessarily provide better picture quality.

Flat screens that curve?

Don't be fooled like we were. This test was planned to be just flat-screen 51 cm TVs, and that's what we thought we'd bought, based on what manufacturers told us. But when the models arrived, some had a truly flat screen and others still curved at the edges. Most screens are flatter now than they used to be, with a flatter, squarer picture tube, which appears to be enough to get them called 'flat'. But if it's a true flat screen, you should be able to touch all points with a straight-edged ruler (see the table on page 42 for the models that have a true flat screen).

The point about a flat screen is that you get fewer reflections from windows, room lighting and so on. It should also allow a wider viewing angle — you can sit further to the side of the screen and not see a distorted picture. What a flat screen doesn't seem to guarantee is better picture quality.

To get that you still need to compare models in the shop to see which gives you the best picture. Stand about 2.5 m away because 51 cm TV screens are best viewed from this distance. At home, position the TV away from reflections from light bulbs or windows, to minimise annoying interference with the picture.

The little extras

If you want more than to simply turn on the TV and watch your favourite programs, there are lots of extra features and functions to choose from (see *What to look for*, page 40, for details).



PHOTOS: RHONDA THWAITE

IN BRIEF

- Flat-screen TVs don't automatically provide better picture quality, so compare plenty of models before shelling out the extra money.
- If sound quality is important to you it's worth considering a model with full stereo sound, as opposed to AV stereo or mono (see *What to look for*, page 40, for more info).

WHAT TO BUY

LG CT-21Q20ET	\$749
PHILIPS 21PT3942/79R	\$739
PHILIPS 21PT3742/75R*	\$499

* Not stereo

BEST BUY

Changing the shape of your picture

The conventional TV width-to-height ratio is 4:3, but nowadays some programs are broadcast in a different ratio (usually the 16:9 wide-screen format), meaning you get a picture that doesn't fill the entire screen — with 16:9 it leaves a black strip across the top and bottom of the screen. **Aspect ratio control** allows you to manipulate the screen image to make it appear shorter or taller, wider or thinner.

In this test, both **LG** models, both **PHILIPS** models and the **SAMSUNG CS-21A8WT** can stretch the image vertically from a wide format to a normal format so

that the picture fills the screen. Unfortunately this loses some of the picture or, more importantly, subtitles if there are any.

Both **LG** models and the **SAMSUNG** also have an aspect ratio control feature that works by squeezing the picture vertically so it looks less tall. We're not quite sure what this would be useful for, but you might have fun with it.

The **LG CT-21Q20ET** is the only model that can squeeze or stretch the image, vertically or horizontally, in incremental steps rather than in one jump.

STEREO TIP

While many TVs have full stereo sound these days, their built-in speakers aren't always designed to produce the best hi-fi sound. They can be too close together, not facing in the right direction, too small, not properly baffled, not driven by a good-quality amplifier, and/or the amp may not be powerful enough to deliver a good stereo effect. Given the limitations of a TV's size and shape, some of this may be unavoidable. To get better-quality sound, connect the audio outputs of the TV to a good-quality sound system and speakers (as long as the speakers aren't so far from the TV that the sound starts to seem 'disconnected' from the image).

WHAT TO LOOK FOR

See the table for which models have some of these features.

■ **Picture quality:** Our panel noted that some TVs have a better picture with certain kinds of image than with others. In the shop, look at a variety of images — such as a scene with people to check skin colour and a landscape for fine detail — and try out the picture controls (colour, contrast, brightness and sharpness). Avoid any that need to be set to maximum to give a good result, as there'll be no room for adjustment as the set gets older.

■ **Sound quality** is also important, so turn up the volume to check for distortion. TVs with 'full stereo sound' can receive TV broadcasts in stereo and get stereo sound through their RF or AV inputs (from a sound source like a VCR, DVD player, etc). TVs with stereo AV inputs only, or 'AV stereo' capability, can't receive TV broadcasts in stereo, but can receive stereo sound through their AV inputs from another source like a stereo VCR.

■ **True flat screen:** The viewing area of the picture tube on TVs with this feature is completely flat, so there's less reflection of surroundings.

■ **AV input:** This allows you to plug in a picture source like a VCR or camcorder. All the tested TVs have a rear socket for attachments, and all except the JNL have another at the front. If this is independent of the rear socket, it allows you to plug in something else at the same time: for example, your VCR permanently at the back and a camcorder occasionally at the front without having to unplug the VCR.

■ **S-video input:** Like an AV input, this allows you to plug in a picture source like a VCR, but claims better picture quality. (We didn't test it.)

■ **Aspect ratio control:** This allows you to squeeze or stretch the screen image — see *Changing the shape of your picture*, page 39, for an explanation and the models with this feature.

■ **Automatic tuning:** The TV searches through all the TV broadcasts in your area and assigns them to consecutive channel numbers.

■ **Manual tuning:** You choose the channel number, then scan the spectrum until you come to a clear signal you want to assign the channel number to.

■ **Manual fine-tuning:** The strongest signal stored by automatic or manual tuning might not give the clearest picture or sound. This feature lets you move slightly up or down the spectrum to get the best signal.

■ **Channel skip or erase:** When using the up and down keys to scroll through channels, this feature allows you to

automatically skip over or erase channels that aren't picking up a clear signal, or no signal at all.

■ **Channel relocate (or swap):** Allows you to reassign channels to different numbers. One use of this could be to let you auto tune channels instead of tuning manually, and then simply reassign them to different numbers.

■ **Picture setting memory:** Allows you to program your preferred picture settings for things like colour, contrast and brightness.

■ **Preset picture settings:** Most TVs come with one to four picture settings, some of which are settable and can be recalled if you change to another one. Some models also have pre-programmed and settable sound settings.

■ **Previous channel:** Lets you switch back to the previous channel viewed without hunting for its number.

■ **Child lock:** Prevents operation of the TV without the remote control or, on some models, without typing an access code into the remote control (so you don't have to hide the remote, just remember the code!). The JNL, KONKA, ORION, PALSONIC and the two SHARPS don't have a child lock feature. Several models have individual channel locks.

■ **Automatic standby:** Switches the TV to standby after a few minutes when no broadcast signal is received. The SONY doesn't have it.

■ **Teletext:** Allows you to receive onscreen text information such as weather, news and other programs.

■ **NTSC-compatibility:** Allows you to watch videos and DVDs in the US television format.

■ **On timer:** The TV can be programmed to switch on at a certain time; it's also called a wake-up timer. The JNL, KONKA, PALSONIC and the two PHILIPS don't have one.

■ **Off timer:** The TV can be programmed to switch off at a certain time (a sleep timer).

■ **Reminder timer:** The TV can be programmed to flash an onscreen symbol or give a beep after a certain amount of time. Only the two SHARP models have this feature.

■ **Channel recall:** Displays the current channel number.

■ **Stereo, pseudo-stereo or sound-widening effect:** Models with stereo sound can reproduce a stereo sound source in full. If the sound source isn't stereo, the SAMSUNG may be able to create the effect of stereo sound with its pseudo-stereo feature. A sound-widening effect, found on the LG CT-21Q20ET, PANASONIC and PHILIPS 21PT3942/79R, adds dimension by creating the illusion that the TV's sound source is located away from the TV.

■ **Mute:** Turns the volume on or off.

■ **Remote can control VCR:** Some TV remotes (both the LG models in this test) have function keys to control some VCRs.

■ **Multilingual:** Most of the tested models are capable of displaying onscreen instructions in up to five languages other than English. The JNL, KONKA and LG CT-21Q20ET can't.



PROFILES

The televisions in the *What to buy* list are profiled in rank order. Prices shown are a good target to aim for when shopping around, based on nationwide checks in January 2001. Anything lower is a bargain.

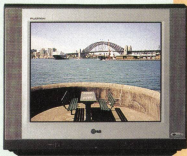
LG CT-21Q20ET

Target price: \$749

GOOD POINTS

- Best picture quality — very good colour and definition.
- Best sound quality — clear, with good bass and treble.
- True flat screen.
- Full stereo.
- Sound-widening effect (see *What to look for*, left, for an explanation).
- Variable aspect ratio control — the only model tested that allows you to squeeze or stretch the screen image in increments, vertically or horizontally (see page 39 for more on this).
- On timer.

- The remote can also control some VCRs.
 - Room lighting sensor — this automatically adjusts the picture according to the room's lighting, but can be turned off.
 - Indoor aerial supplied.
 - Teletext.
 - Child lock.
- BAD POINTS**
- Onscreen instructions only in English.



PHILIPS 21PT3942/79R*

Target price: \$739

GOOD POINTS

- Good picture quality.
- Good sound quality.
- Second-easiest to use (a good remote control and onscreen display).
- True flat screen.
- Full stereo.
- Sound widening (see *What to look for*).
- Aspect ratio control (screen image can be vertically stretched).
- Teletext.
- Child lock — all channels or up to five channels can be individually locked with an access code, so you don't have to hide the remote... just remember the codes!

BAD POINTS

- The front panel buttons are too close to each other and aren't easy to use.
 - The instruction manual is just one large sheet folded several times, like a road map.
 - No on timer.
- * This model has been discontinued but may still be available in shops.



PHILIPS 21PT3742/75R

Target price: \$499

GOOD POINTS

- Second-best picture quality.
- Good sound quality.
- Easy to use (good remote control and onscreen display).
- Aspect ratio control (screen image can be vertically stretched).
- Teletext.
- Child lock — all channels or up to five channels can be individually locked with an access code.

**BEST
BUY**

BAD POINTS

- Not a true flat screen (see *Flat screens that curve?*, page 39).
- Mono sound.
- The front panel buttons are too small and too close to each other, and aren't easy to use.
- No on timer.



What about the rest?

- The **SHARP CX51K4** scored well for picture quality and has a good range of features, but its sound quality was second-lowest.
- The **SAMSUNG CS-21A8WT** only scored 65% for picture quality (the best models scored over 80%). It had the highest score for ease of use, though, being the simplest to tune manually, with a clear onscreen display. It has an individual child lock for each channel.
- The **SHARP CX51K3** scored the lowest (52%) for sound quality and the **JVC AV-21PM** only 62% (the best models scored 70% to 80%).
- The **ORION 21RFS** has a good range of features but wasn't a top performer in any of our tests.
- The **PANASONIC TC-51PS10A** has a good range of features, but only scored 65% for ease of use.
- The **KONKA K2171E3** achieved good scores for picture and sound quality, but was pulled down by its lower ease of use score.

These comments aside, all the above TVs are models you'd probably be reasonably happy with, especially if you found them at a good price.

The following models are more mediocre.

- The **SONY KV-PF21P10** scored 100% for standby energy consumption, but only 64% and 60% for picture and sound quality respectively. It also scored the lowest for ease of use.
- The **PALSONIC 5179** didn't score well for picture or sound quality.
- The **LG CA-21F89** has a wide range of features (including an on timer and aspect ratio control) and is easy to use, but didn't score well for picture or sound quality.
- The **JNL JNL5103** has good picture quality, but low scores for sound quality and standby energy consumption. It's the second-lowest for ease of use and has the smallest range of features.

51 cm TVs

1

FEATURES

Brand / model (in rank order)	Manufacturer / distributor	Origin	Target price (\$)*	Warranty (years)	Dimensions (H x W x D; mm) **	Stereo / mono	True flat screen	Earphone socket	Front AV inputs independent of rear inputs
LG CT-21Q20ET	LG	Korea	749	1	480 x 595 x 485	Full stereo	✓	✓	✓
PHILIPS 21PT3942/79R (A)	Philips	Malaysia	739	1 (B)	460 x 600 x 490	Full stereo	✓	✓	
PHILIPS 21PT3742/75R BEST	Philips	China	499	1 (C)	490 x 610 x 480	Mono		✓	
SHARP CX51K4	Sharp	Australia	529	1	460 x 595 x 485	Mono		✓	✓
SAMSUNG CS-21A8WT	Samsung	Korea	729	1	455 x 575 x 480	Full stereo	✓	✓	
SHARP CX51K3	Sharp	Australia	499	1	475 x 500 x 475	Mono		✓	✓
JVC AV-21PM	Hagemeyer	Thailand	699	2	470 x 600 x 485	Mono	✓	✓	
ORION 21RFS	Castel	Thailand	649	2 (D)	445 x 590 x 485	Full stereo	✓	✓	✓
PANASONIC TC-51PS10A	Panasonic	Australia	799	1 (E)	470 x 510 x 475	Full stereo	✓	✓	
KONKA K2171E3 (A)	Konka	China	399	ns	480 x 570 x 480	Full stereo			✓
SONY KV-PF21P10	Sony	Malaysia	699	2 (F)	460 x 490 x 490	Mono	✓	✓	✓
PALSONIC 5179	HG	China	399	1	475 x 590 x 480	AV stereo			✓
LG CA-21F89	LG	Thailand	479	1	475 x 520 x 490	Mono		✓	
JNL JNL5103	JNL	China	479	3	470 x 630 x 470	AV stereo			(G)

* Prices are a good target to aim for when shopping around, based on nationwide checks in January 2001.

** Rounded to the next 5 mm; all protruding parts except the cord are included.

(A) This model has been discontinued but may still be available in shops.

(B) Extra two years \$69, extra three years \$79 or extra four years \$89.

(C) Extra two years \$90, extra three years \$110 or extra four years \$120.

(D) Additional four years for picture tube (part only).

(E) Extra two years \$80, or extra four years \$110.

(F) Extra two years \$88.

(G) Later models are now available with front AV inputs independent of the rear inputs.

(H) At the back.

(I) At the front.

Digital TV?

Confused about whether to go digital? Go to www.choice.com.au and type 'digital TV' in the search box to view our latest information. (If you're a CHOICE subscriber you can get free trial access to our website: just call (02) 9577 3399 and have your email address ready.)

How reliable have subscribers found them?

We asked a group of CHOICE subscribers whether their television had needed to be repaired in the previous 12 months and if they would purchase the same brand again. The responses were for all sizes of television, with 44% of the respondents reporting on 48–51 cm TVs.

Overall, only 8% of respondents said their TV

Percentage of TVs not needing repair

Panasonic/National (4334)	97
Sony (4546)	96
Sharp (1761)	94
Hitachi (285)	93
NEC (1795)	93
Sanyo (871)	93
JVC (418)	92
Mitsubishi (1029)	91
Philips (2034)	90
Samsung (1044)	88
LG/Goldstar (361)	87
Palsonic (506)	87
Akai (1345)	85
Toshiba (190)	85
AWA (260)	83
Blaupunkt (163)	83
Teac (1039)	80

Differences between brands of more than 6% are meaningful.

had needed repair. The graphs below show the results for the brands for which we got sufficient answers (the number in brackets tells you how many readers reported on the brand). Note that the results of the survey cover brands not included in this test, and that we don't have reliability data for all brands on the market.

Percentage who would buy the same brand again

Panasonic/National (4363)	98
Sony (4607)	98
JVC (422)	95
Sharp (1762)	94
Sanyo (888)	94
Mitsubishi (1007)	93
Hitachi (285)	92
LG/Goldstar (361)	92
NEC (1810)	91
Philips (2039)	90
Toshiba (181)	87
Samsung (1045)	85
Akai (1341)	84
Blaupunkt (160)	84
Palsonic (507)	77
AWA (251)	77
Teac (1042)	75

2 3 4 5 6 7

Channel skip / erase	Previous channel	Teletext	Annual standby energy cost (\$)	Picture quality score (%)	Sound quality score (%)	Ease of use score (%)	Standby energy use score (%)	Overall score (%)	Brand / model (in rank order)
Skip	✓	✓	8.20	86	80	71	60	79	LG CT-21Q20ET
Skip	✓	✓	5.30	81	68	82	70	78	PHILIPS 21PT3942/79R (A)
Skip	✓	✓	7.60	82	67	81	60	77	PHILIPS 21PT3742/75R
Skip	✓		3.30	81	53	76	90	75	SHARP CX51K4
Skip		✓	2.40	65	70	85	90	73	SAMSUNG CS-21A8WT
Skip	✓		3.50	77	52	76	80	72	SHARP CX51K3
Skip	✓		3.60	72	62	72	80	71	JVC AV-21PM
Skip	✓		3.80	70	70	71	80	71	ORION 21RFS
Skip	✓		4.60	72	71	65	80	71	PANASONIC TC-51PS10A
Erase	✓		6.60	70	76	66	70	70	KONKA K2171E3 (A)
Erase	✓		0.50	64	60	62	100	66	SONY KV-PF21P10
Skip			6.70	65	61	68	70	65	PALSONIC 5179
Skip	✓		7.10	62	60	74	60	64	LG CA-21F89
Skip			12.40	70	59	63	30	62	JNL JNL5103

BEST
BUY

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For people with a disability

We used guidelines prepared by the Independent Living Centre (ILC) to identify which of the TVs are most suitable for people with a disability.

■ Look for large, well-separated and clearly labelled front-panel controls that aren't hidden away inside a compartment, with controls that perform related functions grouped together. The **ORION** and the **SAMSUNG** have prominent, well-labelled front panels.

■ Remote controls also need keys to be prominent, well spaced and labelled clearly, as with both **LG** models and the **PALSONIC**.

■ For the hearing-impaired, a headphone or earphone socket allows you to connect a hearing device; all the tested models have one except the **JNL**, **KONKA** and **PALSONIC**. Only four models, the **LG CT-21Q20ET**, both **PHILIPS** and the **SAMSUNG**, have teletext, which allows subtitled programs to be viewed.

Models on test

We based our choice of models on the manufacturers' claims that they have a flat screen, so the test doesn't include some brands that said they didn't have a flat-screen model. However (as noted on page 39), several of the models turned out not to have a true flat screen despite the claim. This enabled us to include in our report some more non-flat models that we'd tested for our sister organisation in New Zealand and that are available here too, but some well-known brands are unfortunately still missing. That's the kind of problem caused by claims bending the truth (or in this case, the screen).

1 Features

See *What to look for* on page 40 for an explanation of these and other features.

2 Standby energy cost per year

We measured the energy consumption on standby for all the models tested and calculated the running costs for a year, assuming the TV was on standby for 19 hours and used for five hours out of every 24. Leaving any of these TVs in standby mode when not in use doesn't cost you much, but millions of TVs around the country doing the same thing wastes an awful lot of energy.

3 Picture quality score

The picture quality was rated by a panel of viewers, who studied and rated the images produced

by the TVs in the test. To eliminate distractions the lighting was dimmed and the sound muted, and the brand names were covered to avoid bias. We also checked some standard test patterns to be sure none of the models was faulty.

4 Sound quality score

Our panel listened to movie sounds and music on each TV and rated them for sound quality. We also ran technical tests on the TVs for the following:

- Low-frequency (bass) cutoff.
- High-frequency (treble) cutoff.
- Smoothness over the frequency band.
- Maximum volume level.

5 Ease of use score

We assessed the following for ease of use:

- Remote control: 50%.
- Manual tuning: 20%.
- Onscreen display: 20%.
- Front panel controls: 10%.

6 Standby energy use score

The higher the score, the lower the energy consumption in standby mode.

7 Overall score

The scores were weighted as follows:

- Picture quality: 50%.
- Sound quality: 20%.
- Ease of use: 20%.
- Standby energy use: 10%.

4 slice toasters

Do you need an expensive toaster to get good toast?

IN BRIEF

■ Paying more for a toaster doesn't guarantee good toast, with one of the best performers costing just \$45 and two of the worst well over \$100. The most expensive toaster on test, the **DUALIT 40227**, scored the lowest overall for both toasting quality and ease of use — so at \$485, we certainly don't recommend it.

■ In general, these four-slice toasters are more likely than two-slice models to burn a single slice if you don't remember to adjust the browning control.

FOUR-SLICE TOASTERS mean hungry families don't have to wait so long for toast. The 13 in this test range in price from \$30 to \$485, and while none of them fits the ideal, the models towards the top of the list should keep you happy enough (see *What to buy*, below).

Four-slice toasters can have four short slots or two long ones. The test includes one from each available brand, with a preference for extra-wide slots for toasting crumpets and muffins. And as the photos show, you have quite a choice of toaster styles to sit on your kitchen bench these days.

An ideal toaster would consistently toast bread to the preferred colour, evenly, on both sides, whether you fill it to capacity or just use one slot. It should be safe to use, preferably with a cool-wall design — that is, a housing that doesn't get too hot to touch. If it handles crumpets, muffins and different types of bread, has a crumb tray that's easy to empty and controls that are easy to read and understand, that's great too. These toasters varied in how they shaped up to this ideal.

In tests using a single slice of bread, all but one of them scored poorly, burning the toast. Only the **RONSON 8591 Kitchen Classic**, a two-slot model



PHOTOS: RHONDA THWAITE

with a special switch for two- or four-slice operation, scored OK in this test, so you'll need to adjust the browning control down every time you want to cook just one slice in the other four-slice models.

Ouch!

Three of the 13 toasters failed our surface-temperature safety test, meaning the outside can become hot enough to burn you if you accidentally touch it — not part of the Australian Standard tests for toasters, but we think it's important. Toasters with a cool-wall design often have a plastic body and don't get as hot as others, though four with painted metal or chrome housings also passed our surface temperature tests. These may be a safer option for households with children.

Notably, however, the **RUSSELL HOBBS 9209-10 Classic Coolwall** failed our surface temperature test, even though the name implies — and the packaging says — it has a cool-wall design. If safety is a priority for you, see the table on page 47 to find out which toasters passed our surface temperature test.

WHAT TO BUY

BREVILLE BT460	BEST BUY	\$45
SUNBEAM TA7450 Quantum Toast & Crumpets		\$92
KENWOOD TT990		\$119
RONSON 8591 Kitchen Classic		\$60
PHILIPS Compact HL5224		\$50

PROFILES

The toasters in the *What to buy* list are profiled in rank order from top to bottom; see the table on page 46 for which features they have. Prices shown are recommended retail.



Breville BT460



Sunbeam TA7450



Kenwood TT990



Ronson 8591



Philips HL 5224

BREVILLE BT460 ELECTRONIC

RRP: \$45

Consistently makes even, nicely browned toast at full capacity, though burns a single slice unless you adjust the browning control. It's easy to clean, and its browning control is easy to use.

BEST BUY**SUNBEAM TA7450 QUANTUM TOAST & CRUMPETS 4 SLICE ELECTRONIC**

RRP: \$92

Consistently makes good toast at full capacity, but burns a single slice unless you adjust the browning control. It's easy to clean, and its browning control is easy to use. Using the crumpet button cooks crumpets nicely, giving the best results in the test, and its defrost setting cooks frozen bread well.

KENWOOD TT990

RRP: \$119

Consistently makes good toast at full capacity, with a good result for muffins, but burns a single slice unless you adjust the browning control. Its crumb tray is easy to clean but the chrome finish needs polishing to look its best. Its defrost setting cooks frozen bread well, and it has a warming rack for buns, scones, etc. Its surface gets quite hot, so it may not be the best choice if you have children, and its control markings aren't very easy to read.

RONSON 8591 KITCHEN CLASSIC FOUR SLICE ELECTRONIC

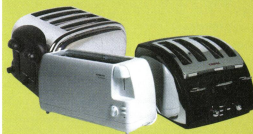
RRP: \$60

It has the best toasting score, a good result for muffins and is the only model tested that toasts a single slice quite well without adjusting the browning control, which is easy to use. Its crumb tray is easy to clean, but the chrome finish needs polishing to look its best. Its high-lift lever is stiff and control markings aren't easy to read.

PHILIPS COMPACT HL 5224 ELECTRONIC

RRP: \$50

While it browns toast evenly and has a good result for muffins, its overall toasting score isn't quite as high as the others in the *What to buy* list. It's easy to clean overall, including its crumb tray, its browning control is easy to operate, and it gives good results with frozen bread even though it doesn't have a separate defrost button.

**What about the rest?**

■ Top: The **BREVILLE BT40 Retro Toast 4** (back, left) is OK for toasting and ease of use, but it's fairly expensive. The **KAMBROOK KT968 Aquarius 4 Slice** and **TEFAL 532850 Avanti Deluxe** (front, right) only scored 51% for toasting performance, though the **KAMBROOK** is quite easy to use.

■ Centre: The **BLACK & DECKER ET44WE Quartet** (left) and **RUSSELL HOBBS 9209-10 Classic 4 Slice** (centre) failed the surface temperature test, meaning you'd have to be particularly careful with children about. Their scores were mediocre too — you can get better toasters that don't get so hot.

■ Bottom: The **TIFFANY TA-545 Automatic 4 Slice** (back, left) and **DE'LONGHI CT04 Classic** (front, centre) scored less than 50% for toasting and so aren't recommended. The **TIFFANY** also failed the surface temperature test and requires a tool to unscrew the crumb tray for cleaning.

With the lowest toasting and ease of use scores and a price tag of \$485, the **DUALIT 40227 The Toaster** also isn't recommended. Its toasting control is a timer, so effectively you reset the toaster every time it's used. And it isn't a pop-up toaster — you raise the lever manually after the toast is cooked, the idea being to keep the toast warm inside the slot.

TOASTERS

TOASTERS

equal

1

BEST BUY

equal

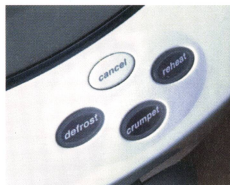
Brand/model (in rank order within groups)	Manufacturer/ distributor	Origin	Price (\$)*	Warranty (years)	Two long slots	Variable-width / self-centring slot	High-lift carriage lever	Auto switch-off if bread jams	Cord storage	2/4-slice operatio	Crumpet button	Reheat button	Frozen / defrost button	Cancel button
BREVILLE BT460 Electronic	Breville	China	45	1	✓	✓	✓		✓					✓
SUNBEAM TA7450 Quantum Toast & Crumpets	Sunbeam	China	92	1	✓	✓	✓	✓		✓		✓	✓	✓
KENWOOD TT990	Hagemeyer	China	119	1	✓	✓	✓	✓	✓			✓	✓	✓
RONSON 8591 Kitchen Classic Electronic	Housewares Int.	China	60	1	✓	✓	✓		✓	✓		✓	✓	✓
PHILIPS Compact HL 5224 Electronic	Philips	China	50	1	✓	✓	✓	✓	✓					
BREVILLE CT40 Retro Toast 4	Breville	China	105	1		✓	✓		✓	✓		✓	✓ (C)	✓
KAMBROOK KT96B Aquarius	Breville	China	53	1	✓				✓			✓		✓
TEFAL 5328.50 Avanti Deluxe	Groupe SEB	China	120	1		✓	✓		✓	✓		✓	✓ (C)	✓
FAILED SURFACE TEMPERATURE TEST														
BLACK & DECKER ET44WE Quartet	Mistral	China	40	2	✓									
RUSSELL HOBBS 9209-10 Classic Coolwall	Asko	China	109	1		✓	✓		✓	✓			✓	✓
NOT RECOMMENDED (POOR TOASTING SCORE)														
TIFFANY TA-545 Automatic	GAF	China	30	1	✓									✓
DELONGHI CT04 Classic	Parex	China	170	1		✓	✓			✓			✓ (C)	✓
DUALIT 40227 The Toaster	JR Classic Trends	UK	485	5 (A)						✓				

WHAT TO LOOK FOR

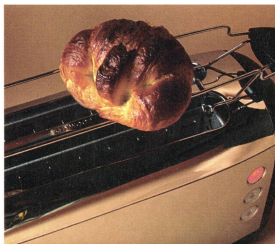
- If space is a priority, a toaster with **two long slots** is more compact than one with four.
- A **variable-width** or **self-centring slot** allows the toasting chamber to toast different thicknesses of bread evenly.
- The **crumb tray** should slide out easily for emptying. If it's a hinged flap instead, it shouldn't open too easily and spill crumbs everywhere. And you certainly don't want a crumb tray that needs any kind of tool to open it.
- A **high-lift carriage lever** makes it easy to remove smaller items such as crumpets and muffins.
- A good safety feature is to **automatically switch off** if toast becomes jammed.
- **Cord storage:** Storage space around the base of the toaster lets you adjust the length of cord used, minimising the risk of accidents and keeping the bench tidy.
- **Two- or four-slice operation:** Two models with four slots, the **DELONGHI** and the **TEFAL**, are like two two-slice toasters joined together, so the controls can be set independently. This could be useful for household members who prefer different bread types or degrees of browning. Four other models, the **BREVILLE CT40**, **DUALIT**, **RUSSELL HOBBS** and **RONSON**, have a two- or four-slice switch. All these models use less than full power when toasting one or two slices.

- **Reheat button:** Reheats already cooked toast, without burning it.
- **Frozen bread or defrost button:** Defrost or frozen bread settings lengthen toasting time to compensate for the lower starting temperature of the bread; turning up the browning control has the same effect.
- Most toasters have a **cancel button** so you can quickly halt the toasting cycle if the toast is burning — otherwise lift the carriage or turn the control to zero.
- If your household includes children it's a good idea to look for a toaster with **cool-touch walls** — though see *Ouch!* on page 44 for an example of when it didn't work.
- **Easy cleaning:** Look for a toaster that won't gather dirt, with smooth joins and few indentations and buttons. Chrome toasters show dirt, like fingerprints, more easily than plastic ones, and need polishing to look their best.

The Kenwood has a warming rack that sits above the slot, designed to keep toast warm or heat buns, scones, etc. Never use this feature to warm food with a topping or filling that could melt or fall off, because it could drop into the toasting chamber and burn.



Crumpet setting: The Sunbeam has a crumpet button and gave better results with crumpets than the other models, toasting them nicely without burning the bottom.



Temperature test	3	4	5	6	7	8	9	10	11	
Toasting speed	OK	OK	OK	Good	Good	Poor	65	76	68	Brand/model (in rank order within groups)
Crumpets	OK	Good	OK	Good	Good	Poor	65	76	68	BREVILLE BT460 Electronic
Muffins	OK	OK	Good	Good	Good	Poor	65	65	65	SUNBEAM TA7450 Quantum Toast & Crumpets
Evenness of browning	OK	OK	Good	Good	OK	OK	67	59	65	KENWOOD TT990
Repeatability of browning	OK	OK	Good	Good	OK	Poor	58	79	64	RONSON 8591 Kitchen Classic Electronic
Toasting a single slice	Good	OK	Good	Good	OK	Poor	58	63	60	PHILIPS Compact HL 5224 Electronic
Toasting score (%)	Good	OK	OK	OK	OK	Poor	51	76	59	BREVILLE CT40 Retro Toast 4
Ease of use score (%)	Good	OK	Good	OK	OK	Poor	51	54	52	KAMBROOK KT96B Aquarius
Overall score (%)	OK	OK	Poor	OK	Good	Poor	58	62	59	TEFAL 5328.50 Avanti Deluxe
Brand/model	OK	OK	Poor	Good	OK	Poor	58	53	57	BLACK & DECKER ET44WE Quartet
	OK	OK	Poor	Good	OK	Poor	58	53	57	RUSSELL HOBBS 9209-10 Classic Coolwall
	Good	OK	Poor	Poor	OK	Poor	41	52	44	TIFFANY TA-545 Automatic
	OK	OK	Poor	Poor	Poor	Poor	30	64	40	DELONGHI CT04 Classic
	Good	Poor	Poor	Poor	Poor	Poor	30	48	35	DUALIT 40227 The Toaster

* Recommended retail price.

(A) Not including the elements, which are covered for two years.

(B) Not applicable — not a pop-up toaster.

(C) Didn't give good results with frozen bread.

(D) But failed our surface temperature test.

1 Features

See *What to look for*, left, for an explanation of these.

2 Toaster surface temperature test

Toasters passed our surface temperature test if their walls stayed at 68°C or cooler after four toasting cycles. 'Borderline' means the temperature was more than 68°C but less than 78°C; and 'fail' means the surface temperature exceeded 78°C.

3 Toasting speed

A toaster that can toast a standard slice of bread in less than two and a half minutes is rated as 'good'. Between two and a half and three and a half minutes is rated 'OK'.

4 Crumpets

The **SUNBEAM** TA7450 has a setting especially for toasting crumpets, which may account for its having the only 'good' rating.

5 Muffins

These are smaller than standard slices of bread, so require a high-lift lever for easy removal. However, on two of the models that claim to have one, the **DELONGHI** and the **RUSSELL HOBBS**, it can't be raised enough to eject muffins easily.

6 Evenness of browning

This test assesses how uniform the colour of the toast is on both sides when toasting four slices.

7 Repeatability of browning

This test checks that the level of browning is repeatable over four consecutive cycles, without adjusting the browning control.

8 Toasting a single slice

How well do they toast one slice of bread without adjusting the browning control? Toasters with two- or four-slice operation (see *What to look for*) were set for two slices.

9 Toasting score

The toasting score is made up as follows:

- Evenness of browning: 35%.
- Repeatability of browning: 35%.
- Single-slice toasting: 30%.

Any toaster that scored less than 50% for toasting isn't recommended.

10 Ease of use score

The ease of use score is made up as follows:

- Setting the browning control: 40%.
- Cleaning the exterior: 30%.
- Crumb removal: 30%.

11 Overall score

The overall score is a combination of the above two scores, weighted as follows:

- Toasting score: 70%.
- Ease of use score: 30%.

No fires

All models passed our electrical safety tests and fire test, where fruit bread was toasted on the longest cycle possible — they all charred the bread, but none set it on fire or shot it burning onto the bench.

Three of the toasters in the *What to buy* list — the **SUNBEAM**, **KENWOOD** and **PHILIPS** — automatically switch off if toast becomes jammed, but your safest option is to stay near a toaster while it's in use.

RECALLS & BANS

If you find a recall or ban not on our list, please let us know. Companies often rent 1800 numbers for a couple of months after the recall is announced. If the number given is no longer operating, phone the manufacturer or retailer direct.

THE PRODUCT: Hunter Leisure has recalled **Huffy Mudslinger 16 inch boys' bikes** and **Huffy Secret Treasures 16 inch girls' bikes**, sold through KMart stores since April 2000, and targeted at four- to eight-year olds. **The problem:** The frame may break while the bike is in use. **What to do:** Don't ride the bicycle. Return it to your local KMart store for a full refund.

THE PRODUCT: Jackel has recalled small and large **Tommee Tippee dummies** with a yellow duck or orange tiger on a translucent blue or green shield, ref. nos 404286 and 404287 on the packaging, with carry cases; and **Glow-In-The-Dark dummies**, ref. no. 403190, featuring a glow-in-the-dark green handle and pink or blue shield. Sold through KMart, Big W and Target stores and pharmacies.

The problem: On the former the silicone nipple may split; and on the latter the handle may detach from the shield, in both cases posing a choking hazard. **What to do:** Don't use them. Return to the place of purchase for a full refund. For further information or to arrange a free replacement, contact the Tommee Tippee information line daily (including weekends), 9 am–5 pm EST, on 1800 890 011.

THE PRODUCT: Everest Colonial has recalled **Everest brand Cassata** (frozen dessert) sold in the Melbourne metropolitan region only, in a 375 mL pack with a wraparound cardboard sleeve and a plastic tray inside that contains 3 x 125 mL individual serves, marked with best-before dates of 13 Dec 01 or 22 Dec 01.

The problem: It may contain *Listeria monocytogenes*, which may cause illness in pregnant women, the very young, the elderly and people with suppressed immune systems. **What to do:** Don't eat it. Return it to the place of purchase for a refund, or for further information contact Everest Colonial on (03) 9460 6588.

THE PRODUCT: Go-Lo Australia has recalled **Dolphin lamps** sold without a powerpack (voltage adaptor).

The problem: The Dolphin lamp has an internally exposed screw that can cause users to receive an electric shock through the coil wire base, and doesn't comply

with the Australian and New Zealand Standard 60598.2.10:1998.

What to do: Don't use it. Return it to the nearest Go-Lo store for a refund.

THE PRODUCT: Tradesense has recalled **Concorde Pro Fever dual-suspension mountain bikes** with serial numbers starting with the letters KBOOF and KBOOG (located at the bottom of the frame near the pedals), and all **Concorde RS-18 racing bikes** sold exclusively through Target Australia stores.

The problem: They have faulty forks and can cause injury if the quick-release device comes undone while riding, as the forks don't have the correct secondary wheel retention method as required by the Australian Standard 1927:1998.

What to do: Don't ride them. Call the following toll-free number for replacement of the fork: 1800 357 465.

THE PRODUCT: Mazda Australia has recalled **Mazda 323 Protégé (BJ)** vehicles built from June to December 2000, with the following VIN ranges: ■ JMO B110M1 00 122899–126885, ■ JMO B110P1 00 122917–126893.

The problem: Contact may have occurred between the rear cross-member component and the rear left brake hose during the production assembly process, compromising the integrity of the brake hose, possibly affecting braking.

What to do: Contact your local Mazda dealer. For more information phone Mazda Customer Assistance on 1800 034 411, 10 am–4 pm EST.

THE PRODUCT: Ford Australia has recalled **Ford Laser** vehicles **model KN** built between June 24, 2000, and December 22, 2000.

The problem: Contact may have occurred between the rear cross-member component and the rear left brake hose during the production assembly process, compromising the integrity of the brake hose, possibly affecting braking.

What to do: Contact your local authorised Ford dealer to have the hose replaced free of charge if necessary.

THE PRODUCT: Sanitarium Health Food has recalled **Sanitarium So Good Creamy Vanilla Ice Cream Alternative**, with a best-before date of February 6, 2002, or earlier.

The problem: The soy-based ice cream alternative may contain dairy products.

What to do: If you're sensitive to dairy products, don't eat the ice cream. Return the empty container to: Sanitarium Health Food Company, Customer Relations Centre, Reply Pad 66705, Berkeley Vale 2261, for a full refund; or phone 1800 673 392 for more information.

THE PRODUCT: Associated Retailers has recalled **Colorado X-scream Pro dual-suspension alloy mini scooters** sold through Toyworld stores from October 1, 2000, to February 9, 2001.

The problem: A production fault may affect the front suspension wheel assembly, which may cause the wheel to detach while in use.

What to do: Don't ride it. Contact your nearest Toyworld store to arrange to have the scooter inspected. If necessary the front fork assembly will be replaced free of charge. For more information, phone ARL on (03) 9429 8266, or fax (03) 9428 0906.

THE PRODUCT: National Natural Products (also known as National Chemical Products) has recalled **Lysout 1 Gel**, used to treat head and body lice, sold through pharmacies in NSW, ACT and Queensland, and identified by size: 250 mL, batch number 1036, Aust L number 70490, and an expiry date of Dec 2003.

The problem: It's being recalled due to microbial contamination.

What to do: Don't use it. Return it immediately to the place of purchase for a refund. For more information phone the customer service line on (07) 3255 5027.

THE PRODUCT: Holden has recalled **S8 Barina City, Swdin, Cabrio, Olympic pack, GSI, Lambada, Joy and Grand Prix** models, built from 1993 to 2000, and **S8 Combo** models, built from 1995 to 2000, with the last eight digits of the VIN in the ranges below (the VIN is located on the radiator support panel in the engine bay; refer to the owner's manual for a detailed diagram):

Combs: From:	To:
R3033834	R3033834
X3028384	X3028384
T3002006	T3053916
V3015334	V3056810
W3000695	W3059380
X3000201	X3059911
Y3006529	Y3027005
Barinas: From:	To:
P4142331	P4224948
R4016295	R4380456

S4000435	S4429411
T4004684	T4429794
V4000062	V4438327
W4000079	W4444370
X4000134	X4424418
Y4045076	Y4304132

The problem: There is a risk of material fatigue of the front seatbelt buckle anchor plate and/or the locking spring of the front seatbelt buckle, possibly resulting in the front seatbelt buckle not being properly secured or the seatbelt coming undone.

What to do: Contact your local authorised Holden dealer immediately to arrange to have your vehicle inspected, and repaired if necessary. For further information contact the Service Department of any Holden dealership, or the Holden Recall Assistance Hotline on 1800 632 826, Mon–Fri, 8 am–7 pm EST, or Saturday, 9 am–1 pm EST.

THE PRODUCT: Honda Australia has recalled **Honda CB900RR**

motorcycles, manufactured in 2000 and 2001, with the following VIN ranges, affected by a 'clutch outer' recall ('denotes a variable from 0–9, or an 'x'):

Year:	From:	To:
2000	JH2SC44U*YM000001	YM000643
2001	JH2SC44U*1M100001	1M100322
2001	JH2SC44U*1M150001	1M150115

And the following VIN ranges affected by a 'fuel feed hose' recall:

Year:	From:	To:
2000	JH2SC44U*YM000001	YM000643
2001	JH2SC44U*1M100001	1M100211

The problem: Clutch outer recall:

There's a risk that the housing that holds the clutch may break, possibly leading to rear wheel lockup, the engine stalling, or an oil leak from the damaged housing. Also, the clutch lever shaft may break when the clutch is applied, resulting in an inability to disengage the clutch. **Fuel feed hose recall:** The fuel feed hose may burst if the fuel tank is lifted too high during servicing, possibly spraying fuel on the hot engine and igniting.

What to do: Contact your local authorised Honda dealer or Honda Australia's Motorcycle Service Department on (03) 9270 1111.

Weekly updates of recalls and bans are posted on the CHOICE website at www.choice.com.au. You can also email us any recalls or bans not on this list at ausconsumer@choice.com.au.

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Marketing statistics by GK Marketing Services.

Financial information supplied by Canam.

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CHOICE HOME PAGE



A hard day's ride: the CHOICE bike trial.

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MAY 2000 — APRIL 2001

How to use this index

Bold type indicates a test, survey or trial report, normal type indicates other articles.
 * Indicates an update of a previous report, additions or corrections to reports, small follow-up items or letters.
 For space reasons, the index generally doesn't include Choice Cuts, many other small pieces, and Recalls and Bans.

A ged care, nursing homes Air coolers, evaporative Animal testing, for cosmetics Annual buying guide	Jun Nov Jun Dec	managed funds mortgages, choosing and changing planning for a lifetime retire at 50	Jan/Feb Sep, Nov* Jun Apr	Investment clubs Irons, steam	Jun Jun	S alsa Salt: how much do you eat?	Sep Jul, Oct*
B ack pain Banks accounts, how to change accounts with lower fees Barbecues, gas Bike helmets Binoculars Blenders Bookshops online BSE ("mad cow" disease) Bunk beds Buying guide, annual	Jun, Aug* Jul Mar Dec May Jun , Dec* May Nov , Jan/Feb* Mar Sep Dec	Food 20 questions answered caffeine chocolate, taste test coconut milk and cream diet pills eggs fats ain't fats ... ice cream noodles, two-minute olive oil organic salsa salt: how much do you eat? sauces, simmer supermarket value brands teabags Freedom of information Fridges 2-door, 470–520 L side-by-side, 620–660 L	Jan/Feb Aug Jun May Jun Oct Jan/Feb Mar Nov Sep Sep Jul, Oct* Apr Jul Jan/Feb May Sep	J uicers L awn trimmers, petrol Light bulbs, long-life Lighting options Los Angeles M ad cow disease Managed funds Media, science reporting Medical records, privacy Mobile phones hands-free kits phone plans WAP technology Money — see Financial Mops, steam Mortgages, choosing and changing	Oct Nov Jun*, Oct* Oct Oct Mar Jan/Feb Mar May Aug , Apr Aug Apr Apr Sep, Nov*	Shiraz Shopping supermarket price survey supermarket value brands Showers, solar Smoking, how to quit Standby power Steam irons Steam mops Strollers, layback Suitcases, carry-on, trolley Supermarket prices	Apr Dec Jul Apr Jul Dec Jun Apr Aug Oct Dec
C affeine Cameras, compact and APS Camping showers, solar tents, dome Cars car of the future child restraints crash tests, ANCAP satellite navigation (GPS) used car safety Child/baby concerns bunk beds car restraints cots, portable layback strollers Chocolate, taste test Clothes dryers Coconut milk and cream Coffee machines Compact fluorescent light bulbs Computer buying your first offer to subscribers Coolers, evaporative Cordless phones Cots, portable	Jun Jan /Feb Apr Apr Oct Sep Aug May Jan/Feb Sep Sep Jul Aug May May Jun Apr Jun* Nov Nov Nov Jan /Feb Jul	Garden lawn trimmers, petrol watering kits Gas barbecues Global positioning system for cars handheld units Green household, quiz Green power GST H air removal Hands-free kits for mobile phones Health back pain BSE/vCJD caffeine diet pills herbal supplements private insurance call centre advice salt, with quiz smoking, how to quit Healthcare, medical records Heaters, fan Herbal supplements Home/property inspections	Jul, Oct* Apr Jul Sep May May Sep Aug Jun* Mar Aug , Apr Jun, Aug* Mar Jun Oct May Nov Jul, Oct* Jul May May May Mar Jan/Feb Dec Aug Jun	O live oil Online bookshops Organ donation Organic food P aint exterior low-odour Phones cordless mobile — see Mobile phones Portable cots Power, standby Printers, choosing Property/home inspections R angehoods Refinancing your mortgage Refrigerators — see Fridges Retire at 50	Nov , Jan/Feb* Nov , Jan/Feb* Aug, Jan/Feb*, Mar* Sep Oct Jun Jan /Feb Jul Dec Sep Mar Oct, Dec* Sep Apr	Teabags Telephones — see Phones Television digital stereo (68 cm) 51 cm Tents, dome Toasters Travel insurance LA, what to see suitcases, carry-on, trolley	Aug, Dec* Aug* Apr Apr Apr Nov , Jan/Feb*, Mar* Oct Oct
D epilatory creams Diet pills Digital TV Dispute resolution schemes Drills, impact Dryers, clothes E ggs Energy labels, new Environment green power long-life light bulbs Epilators Espresso machines Evaporative air coolers F an heaters Fats ain't fats ... Financial — see also Banks interest rates investment clubs	Mar Oct Aug, Dec* Jul Aug May Jan/Feb Aug Jun*, Oct* Mar Apr Nov May Oct Dec Jun	Ice cream ice cream makers Impact drills Index, four-year Insurance health insurance call centre advice travel Internet chat rooms/IRC searching	Jan/Feb Dec Aug Jun Nov Jan/Feb*, Mar* Jun Oct	V acuum cleaners handheld VCRs, hi-fi W AP technology Washing machines Watering kits, garden Wax kits, hair removal Wine, shiraz	Jul Jul Jan /Feb Apr Jul , Mar Sep Mar Dec		

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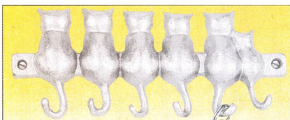
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7 Playful kittens sit in a row with their tails curled ready to hold your keys, pot holders, dishtowels and much more! Brass-look hanger is beautifully detailed and comes complete with matching screws. Measures 20.5 cmL x 8.5 cmH.
N383 BRASS-LOOK KEY HANGERS WAS \$9.90 NOW \$7.90

We just can't find that seventh kitten ...

... or perhaps it's transmuted into a garden light

6 Piece garden light set
EG0031



\$29⁹⁹
6pc

SHOWER CURTAIN

PEVA SUPER DELUXE

- ONE SHOWER CURTAIN 72" x 72" (183CM x 183CM)
- TWELVE UNBREAKABLE CURTAIN HOOKS



- NO POISON TASTELESS
- MILDDEWPROOF INDESTRUCTIBLE

Pretty impressive claims ...

... but does the shower curtain live up to them? Our unlucky reader reports that the curtain truly is tasteless: she ordered it online, where no mention was made of the "ghastly Christmas design with holly and red flowers". But if it also lives up to its claims of indestructibility, it seems she's stuck with it for a long time.

TOYOTA CAMRY CS

S/WAGON, 4 CYL, 2L, PWR STEER, BOOKS, WON'T LAST LONG!



RNR653

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wooden

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 Made in china for topline prod

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What a relief — it's normally so difficult to impress a shelf!

How about a little help?

The hard word would like to thank all the readers who've responded with examples of outrageous ads, promotions and products. We'd like to thank T Anderson, W Boyd, M Field, G Kennedy, B McLeod, T Richardson and A Young for their contributions to this month's Hard Word. Please keep sending them in.

If you have any examples you think deserve to be on this page, send them to The hard word, CHOICE, 57 Carrington Road, Marrickville 2204, or email your suggestions to thehardword@choice.com.au.